

CITY OF QUINHAGAK

Public Safety Facility Business Plan

**FINAL VERSION
JUNE 2008**

This conceptual plan was produced in part with Multi-Use Facilities Grant Assistance made available through the Department of Commerce, Community and Economic Development and the Denali Commission

Submitted by:
The City of Quinhagak

Prepared by:
Northern Management, A Division of CE2 Engineers, Inc.



The Public Safety Facility Business Plan can be found at www.kwinhagak.com

Document View for Quinhagak Public Safety Business Plan

www.docmeister.com -- June 18, 2008

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2. Executive Summary

The City of Quinhagak Public Safety Business Plan was developed to demonstrate to potential funding agencies the need for an improved facility to handle community public safety issues, and to document the plan for the sustainability of a new community facility in Quinhagak. This business plan will provide direction to local leaders for the operation and maintenance of a new Public Safety facility in their village.

As a result of the planning process, the following primary recommendations were presented to the joint Councils of the community of Quinhagak, consisting of the full Tribal Council and City Council:

1. Prioritize which community facility [clinic or public safety] is the number one community need, in order to minimize competition for limited development funds between the projects.
2. Implement a phased approach to development of the Public Safety/Tribal Court Multi-purpose facility that would allow for the construction of a stand-alone Public Safety facility, as well as the future addition of Tribal Court and related services as funds permit.
3. Identify a plan for utilization of the old Public Safety facility once a new facility is constructed.
4. Update the community land use plan to allow for the co-location of essential community facilities around in a central area, to be served by a Heat Utilization Building with central heating and mechanical systems **serving multiple facilities** in the core area.
5. Equip the Heat Utilization Building with alternative energy sources, including the ability to burn drift wood, in order to reduce overall energy costs, and allow for the addition of additional mechanical systems in the facility to enable future facilities to be served.

A 2,313 SF Multi-purpose facility was recommended based on input from planning participants. Phase 1 of that consists of approximately 1,440 SF of Public Safety related space, plus 400 **additional** square feet for the detached Heat Utilization Building [HUB]. The HUB will be designed to accommodate multiple buildings/facilities and provide central heating to the Public Safety building, adjacent Headstart facility, and future clinic.

Phase 2 integrates additional Tribal Court/Justice, ICWA/OCS services which are closely linked to the Tribal Court function, as well as TANF. Phase 2 consists of an additional approximately 873 SF.

Several locations were identified throughout the community as individual stand-alone sites for the new facility, while two core areas were identified that could serve as community facility co-location sites. Tribal Administrator Felipe Hernandez III

recommended a community facility campus adjacent to and west of the existing Headstart and Health/Sanitation Building and there was broad support for this site.

The City and Tribe approved the recommended phased approach, and has prioritized completion of Phase 1 of the Public Safety facility over development of the new clinic as its number one priority. The campus site recommended by the Tribal Administrator was favored by all planning participants and approved by the City and Tribe. The Land Use Plan was updated to allocate land to two large Community Facilities parcels which will allow for the co-location of the future clinic, Public Safety facility, Heat Utilization Building, VPSO and clinic housing. These are just a few of the facilities in the planning stages that will be co-located on this site.

The community is currently collaborating with the Association of Village Council Presidents Inc. to renovate the existing Public Safety facility. The renovations consist of primarily cosmetic improvements [less than \$75,000], but do not increase the capacity of the existing facility. Once a new facility is constructed, the old facility will be moved to the campus site. 1/3 of the old facility will be reserved for detaining youth, separate from the adult facility, while the remainder of the building will be used to meet the significant demand for itinerant housing.

The Tribe has also updated its Long Range Transportation Plan to allow for access to the community facility campus. This will enable the use of Tribal Indian Reservation Roads funding to construct a road to the site, as well as the parking area.

3. Planning Process

Two planning committee meetings were held locally to discuss the Quinhagak Public Safety facility. At these meetings on September 14 and December 19, 2007, the committee and other interested communities members reviewed and discussed various issues regarding the future facility. Discussion items included:

- Program Service Plan and Program Space Plan
- Operating Expenses/Revenue
- Review Conceptual Plan
- Review Proposed Sites
- Funding Sources

The planning committee, in conjunction with its consultant, presented the options and recommendations to a joint council meeting of the City and Tribal Councils on February 5, 2008. One teleconference was convened with Athena Logan of DCCED and a subsequent formal business plan review was completed with officials from both the City and Tribe on June 26th, 2008, where utility consumption and cost projections were thoroughly discussed.

While some of the facility details may evolve over time as the project moves forward through the design phase, the following fundamental guiding principles were adopted:

- To the extent feasible, new community buildings should be co-located at the community facilities campus which is now integrated into the community land use plan
- Any new facility design should accommodate phased expansion to reflect the increasing difficulty of securing construction funds

A Public Safety Planning Committee was established, whose members consist of the following individuals:

- Mayor John Sharp, who oversees the city and its functions
- City Coordinator, Fannie Moore, who coordinates with the mayor
- The Chief of Police, Mr. Wassillie Pleasant; which makes sure the village is safe
- NVK President, Mr. Wassillie Bavilla
- Tribal Administrator, Felipe Hernandez III
- A concerned citizen, Matthew Friendly

The public safety planning committee has no affiliations at this time. The Planning Committee will continue to provide oversight over the development of the Public Safety facility beyond the conceptual planning phase.

More Info:

[Public Safety Facility Planning Sessions](http://kbmeister.bizware.com/urls/index.php?id=3604)
(<http://kbmeister.bizware.com/urls/index.php?id=3604>)

4. Community Overview

Quinhagak lies at approximately 59.75° North Latitude and -161.92° West Longitude, 71 miles southwest of Bethel. (Sec. 17, T005S, R074W, Seward Meridian.) The area encompasses 4.7 sq. miles of land and 0.6 sq. miles of water.

Quinhagak has a transitional climate with both maritime and continental influences. Winter temperatures average between 6 degrees F and 24 degrees F. The Kuskokwim Bay is usually frozen during the winter. Summers are usually rainy and cool, with average temperatures of 41 degrees to 57 degrees F. Precipitation averages 22 inches, with 43 inches of snowfall annually. The average air temperature is 30 degrees F with extremes measured between -34 degrees F to 82 degrees F. Prevailing winds in Quinhagak come from the south and southwest during summer months, changing to predominantly from the north and northeast

from September through March. The winter months also receive a high percentage of winds from the east and southeast. Winds during the spring are variable.

The current population of Quinhagak is 642. According to the 2000 census there were 137 households, and 113 families residing in the city. The population density was 45.8/km² (118.5/mi²). There were 153 housing units at an average density of 12.6/km² (32.7/mi²). The racial makeup of the city was 2.70% White, 96.04% Native American, and 1.26% from two or more races. 0.72% of the population was Hispanic or Latino of any race.

There were 137 households out of which 50.4% had children under the age of 18 living with them, 56.2% were married couples living together, 12.4% had a female householder with no husband present, and 16.8% were non-families. 12.4% of all households were made up of individuals and 1.5% had someone living alone who was 65 years of age or older. The average household size was 4.05 and the average family size was 4.52.

In the city the population was spread out with 37.1% under the age of 18, 9.5% from 18 to 24, 29.5% from 25 to 44, 16.0% from 45 to 64, and 7.7% who were 65 years of age or older. The median age was 27 years. For every 100 females there were 109.4 males. For every 100 females age 18 and over, there were 115.4 males.

5. Facility Description

5.1. Existing Facility Description



The existing Public Safety Facility is 1,104 SF and is over 20 years old. This building consists of a Tribal Court with 205 SF; an evidence room with 20 SF; a storage/filing room with 70.3 SF; (3) 49 SF holding cells; and (1) 8 SF bathroom.

The community has 3-4 VPO's (Village Police Officers) who have limited formal training. A majority of the calls that the VPO's respond to are domestic calls that involve alcohol abuse. The VPO's are

authorized to incarcerate individuals that violate state and local laws and on occasion assist the Alaska State Troopers by escorting prisoners to Bethel, Alaska. The VPO's are permitted to place intoxicated individuals in a holding cell for up to 12

hours or until they are sober. The VPO's are also called upon during search and rescue as well as fire and emergency response.

Currently, the Native Village of Kwinhagak has its own tribal court with a magistrate as local hire, associate judges and tribal clerk(s). There are usually 3-4 Tribal Police offices available with (1) Chief of Police. At times there will be prisoner(s) that have to be held in the village due to weather, but the facilities are not designed to house prisoners for several days.

With a population of over 650 residents, and a summer transient population of 150+, the existing facility is too small to meet the current public safety needs of the Village. The general condition of the building is poor with no flushable toilet or water system. All water is hauled in (honeybucket system). The building is rapidly deteriorating and all finishes are extremely worn. It has three holding cell spaces and no separate space for a juvenile detention. The adjoining tribal court room is not soundproof, compromising confidentiality. The floor needs renovation; the stairways are hazardous; It contains no handicap ramp, no alternative exit from the building and no facilities to house visiting troopers.

More Info:

[Public Safety Facility Inventory Form](http://kbmeister.bizware.com/urls/index.php?id=4858)

(<http://kbmeister.bizware.com/urls/index.php?id=4858>)

5.2. Proposed Facility Description & Consolidation of Services

The proposed facility is a total of 2,713 SF, which includes 400 SF for an outbuilding to be called the "Heat Utilization Building," which will serve as a central mechanical room for facilities co-located on the site. The planning process has allowed for sufficient space to address the community's public safety needs without expanding the scope and scale of the project beyond the means of the community.

The Public Safety Building will include: (4) Holding Cells to contain and hold prisoners, (2) Detoxification Tanks for the inebriated prisoners who require separation from others, a main entrance and reception area, a Tribal Police Office, a second space for a Village Public Safety Officer and space for Evidence Storage. In addition to that space, we have planned for a Transient Room for overnight law enforcement officials.

The plan also includes space for the community's Tribal Court, the Tribal Judge's Office, a Tribal Court Meeting Area and a Reception Area.

Other community services that will be consolidated and housed in the new facility include Indian Child Welfare Act [ICWA], Temporary Assistance to Needy Families [TANF] and the Office of Children's Services [OCS]. OCS currently lacks a home in

the village, and ICWA operates in a separate building away from Tribal Court. These services were chosen due to their close coordination with the Tribal Court. There will be a separate entrance to this area of the building, away from the holding cells.

Other spaces include the common areas which are restrooms and the central heating space.

5.3. Relevant Service Providers

The following service providers are potential stakeholders in this project:

The **Division of Alaska State Troopers (AST)** is charged with statewide law enforcement, prevention of crime, pursuit and apprehension of offenders, service of civil and criminal process, prisoner transportation, central communications, and search and rescue.

The Division is divided into five detachments and two bureaus. Detachments A, B, C, D, and E, and Alaska Bureau of Investigation (ABI), and Alaska Bureau of Alcohol and Drug Enforcement (ABADE). Quinhagak is served by Detachment C. Each Detachment is charged with Division responsibilities within a specific geographic area. Each Bureau is responsible for the statewide discharge of their specific duties and overall responsibilities. Both Detachments and Bureaus are responsible for ensuring efforts are made towards meeting the Division's core missions as it relates to their respective enforcement programs, public education, training, fiscal planning and implementation.

The Association of Village Council Presidents, which, despite most BIA programs being locally compacted by NVK, continues to provide energy assistance and other programs to the community including administration of the **Village Public Safety Officer** program. Currently, AVCP is spearheading renovations of existing public safety facilities in the Y-K Delta, including cosmetic renovations to the old Public Safety building in Quinhagak. AVCP: PO Box 219 Bethel, Alaska 99559 P: 907-543-7300 F: 907-543-3596; www.avcp.org

Coastal Villages Region Fund, Coastal Villages Region Fund [CVRF] is a non-profit corporation organized under the State of Alaska. CVRF has in years past provided financial support for Quinhagak's Public Safety services. CVRF: 711 H Street Anchorage, AK 99501 P: 907-258-5151 F: 278-5150; www.coastalvillages.org

Yukon Kuskokwim Health Corporation, which, under MOA with NVK, oversees the Community Health Aides/Practitioners in Quinhagak and operates the regional hospital and numerous health programs in Bethel; YKHC: PO Box 528 Bethel, Alaska 99559; P: 907-543-6000; www.ykhc.org

Lower Kuskokwim School District, which operates the local school, Kuinerrarmiut Elitnaurviat, grades K-12. L.K.S.D. counselors often travel to the village and address children's issues in conjunction with the Native Village of Kwinhagak Social Services; LKSD: PO Box 305 Bethel, Alaska 99559; P: 907-543-4800; www.lksd.org

Native Village of Kwinhagak, which in addition to operating municipal services, also administers a U.S. Department of Interior Self-Governance Compact providing numerous BIA programs, including Tribal Police. The TPO's consist of typically (3) full time and part-time Tribal Police Officers as well as (1) Chief of Police. NVK's Tribal Courts program includes a Chief Judge appointed by the Tribe, and associate judges and tribal clerk(s). NVK also provides EPA environmental services, and natural resources programs and social services [Indian Child Welfare Act]. NVK: PO Box 149 Quinhagak, AK 99655 P: 907-556-8165 F: 907-556-8166; www.kwinhagak.com

The City of Quinhagak co-manages municipal services in conjunction with the Native Village of Kwinhagak under a comprehensive Memorandum of Agreement and is a signatory to the A.V.C.P. VPSO MOA. City of Quinhagak, PO Box 90 Quinhagak, AK. 99655; P: 907-556-8202 F: 907-556-8166

The Office of Children's Services [State of Alaska], provides child protection services in the Y-K Delta region. These services are coordinated with the local Indian Child Welfare Act program operated by the Tribe. Bethel Family Services : P. O. Box 328; State Office Building; Bethel, Alaska 99559 P: 907-543-3141 F: 907-543-4143

More Info:

[NVK -AVCP Memorandum of Agreement](http://kbmeister.bizware.com/urls/index.php?id=4729)
(<http://kbmeister.bizware.com/urls/index.php?id=4729>)

[Quinhagak 2007 Memorandum of Agreement](http://kbmeister.bizware.com/urls/index.php?id=4847)
(<http://kbmeister.bizware.com/urls/index.php?id=4847>)

5.4. Services to be Provided

The proposed Quinhagak Public Safety Facility includes the following program spaces:

FUNCTION	Approx. SF	Cumulative SF	Phase #
PUBLIC SAFETY			
(4) Holding Cells	268	268	1
(2) Detox Tanks	203	471	1
Entry Way/Office/Jail Guard	78	549	1
TPO Office	112	661	1
2nd Office [VPSO] w/ Evidence Storage	130	791	1
Transient Room [Overnight]	69	860	1
TRIBAL COURT			
Tribal Judge's Office	112	972	1
TANF	69	1041	1
Tribal Court Meeting Area	142	1183	1
Reception Area	174	1357	1
ICWA	85	1442	1
OCS	85	1527	1
COMMON AREAS/RESTROOMS	786	2313	1
CENTRAL HEATING PLANT [EXTERNAL]	400	2713	1
TOTAL FACILITY SQUARE FOOTAGE		2713	1

5.5. Conceptual Layout

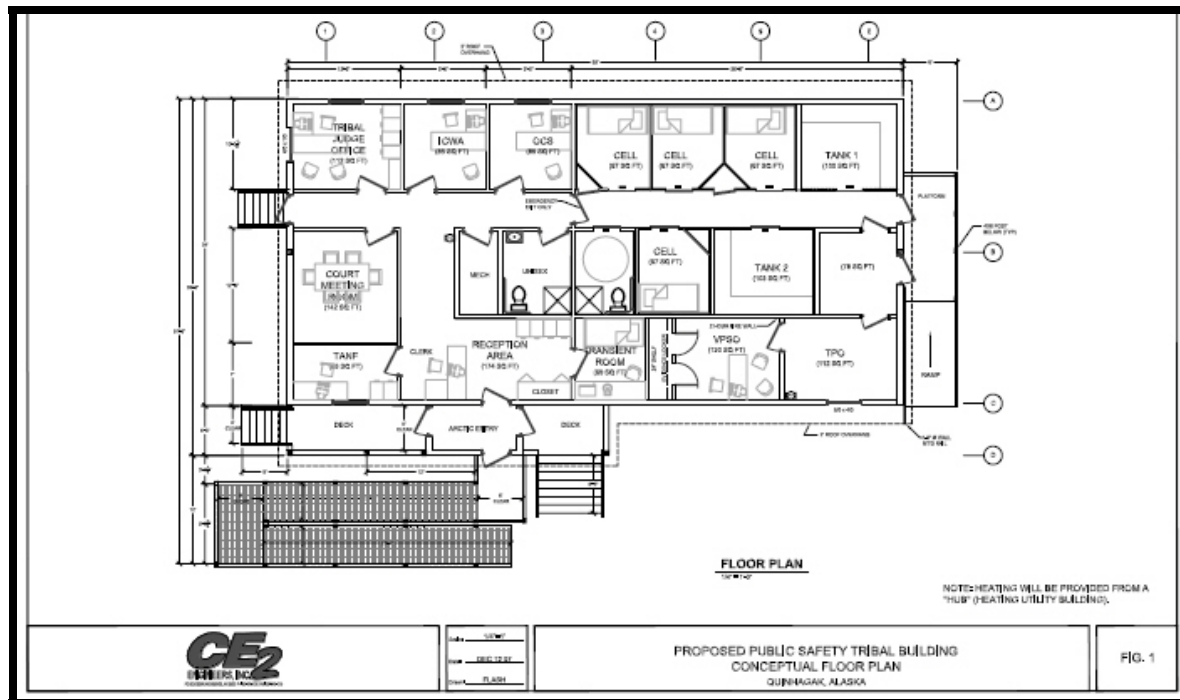


FIG #1 - Complete Public Safety / Multipurpose Facility [above]

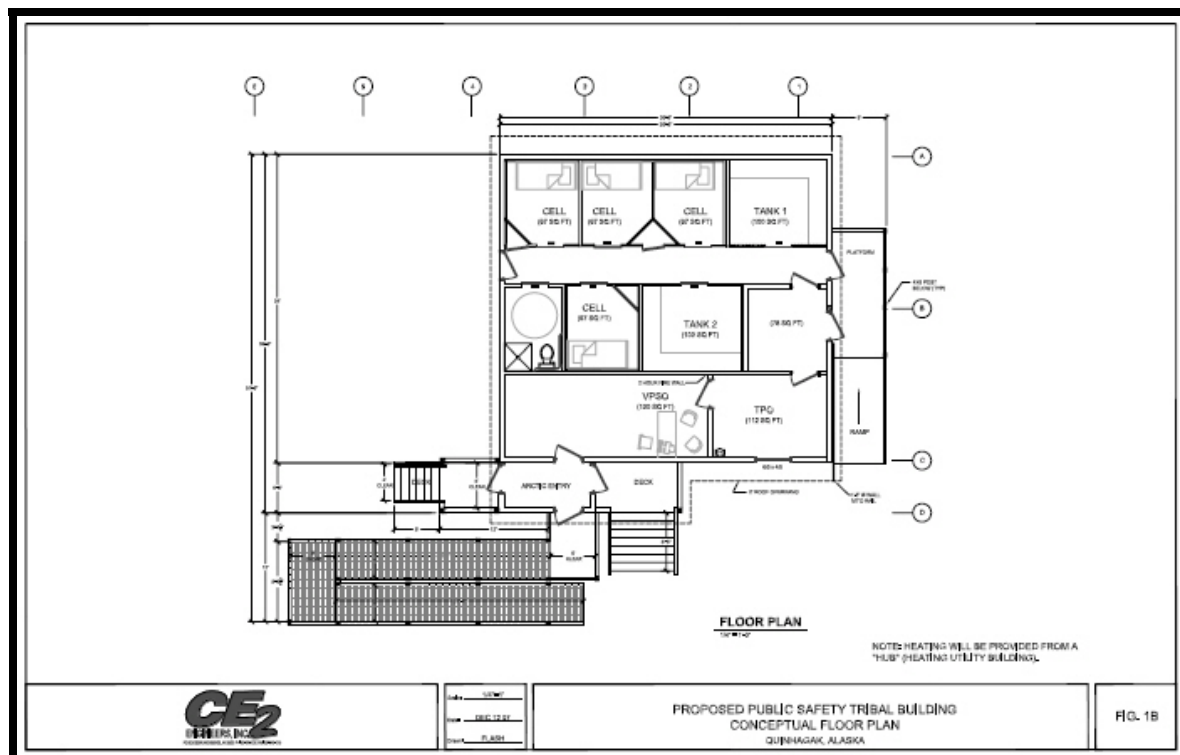


FIG #1B - Stand Alone Public Safety Facility [above]

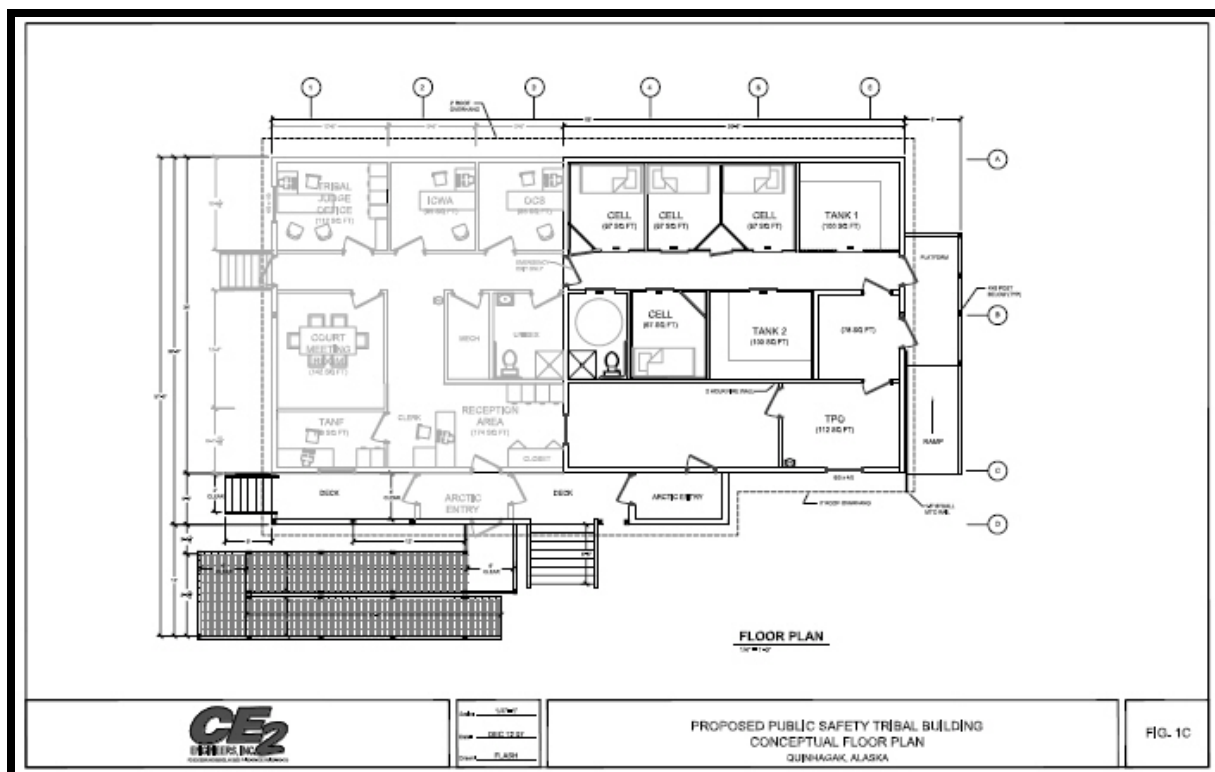


FIG #1C: Phase 1 of a Phased Approach

As a result of community planning sessions, the Phase 1, Phased Approach, was approved by the Joint Councils. This approach will allow the immediate construction of a Public Safety facility with the ability to expand the facility in the future to handle related services and programs.

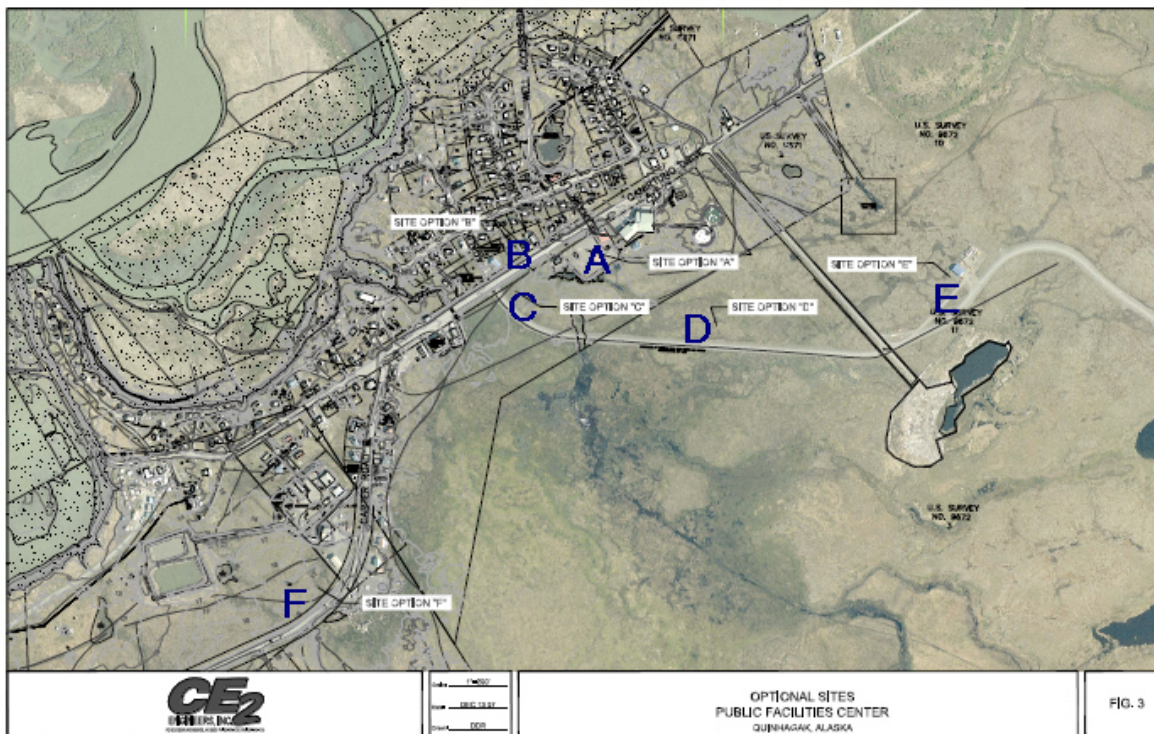
More Info:

[PDF of Conceptual Layout: Public Safety Building](http://kbmeister.bizware.com/urls/index.php?id=4683)
(<http://kbmeister.bizware.com/urls/index.php?id=4683>)

[Conceptual Layout: Public Safety Building, Phased Approach 1B](http://kbmeister.bizware.com/urls/index.php?id=4771)
(<http://kbmeister.bizware.com/urls/index.php?id=4771>)

[Conceptual Layout: Public Safety Building, Phased Approach 1C](http://kbmeister.bizware.com/urls/index.php?id=4773)
(<http://kbmeister.bizware.com/urls/index.php?id=4773>)

5.6. Site Selection Table



Factor	Access to Water / Sewer	Soil Conditions	Site Control	Centrally Located?	Community Preference	
	25 Points	20 Points	40 Points	5 Points	10 Points	
Details and Points	Is the site less than 150 ft. from piped water/sewer; will the building be serviced soon?	Is the site suitable to build on and is there adequate room to accommodate current and future needs?	Who owns the site, is it easy to transfer ownership to City?	Is the facility centrally located, in close proximity to the Clinic? Airport?	Community Support for Site	Total Pts
Site F	25	20	35	5	10	95
Site A	25	15	40	5	5	90
Site B	25	15	40	5	5	90
Site C	15	10	30	5	5	65
Site D	0	10	30	5	5	50
Site E	0	10	30	5	5	50

The Site Selection Table [Above] provides a detailed overview of the factors that were considered during the site selection process. Site F was chosen because of the availability of sufficient land to co-locate all proposed community facilities in the

conceptual planning phase, its central location, and good access to water/sewer infrastructure.

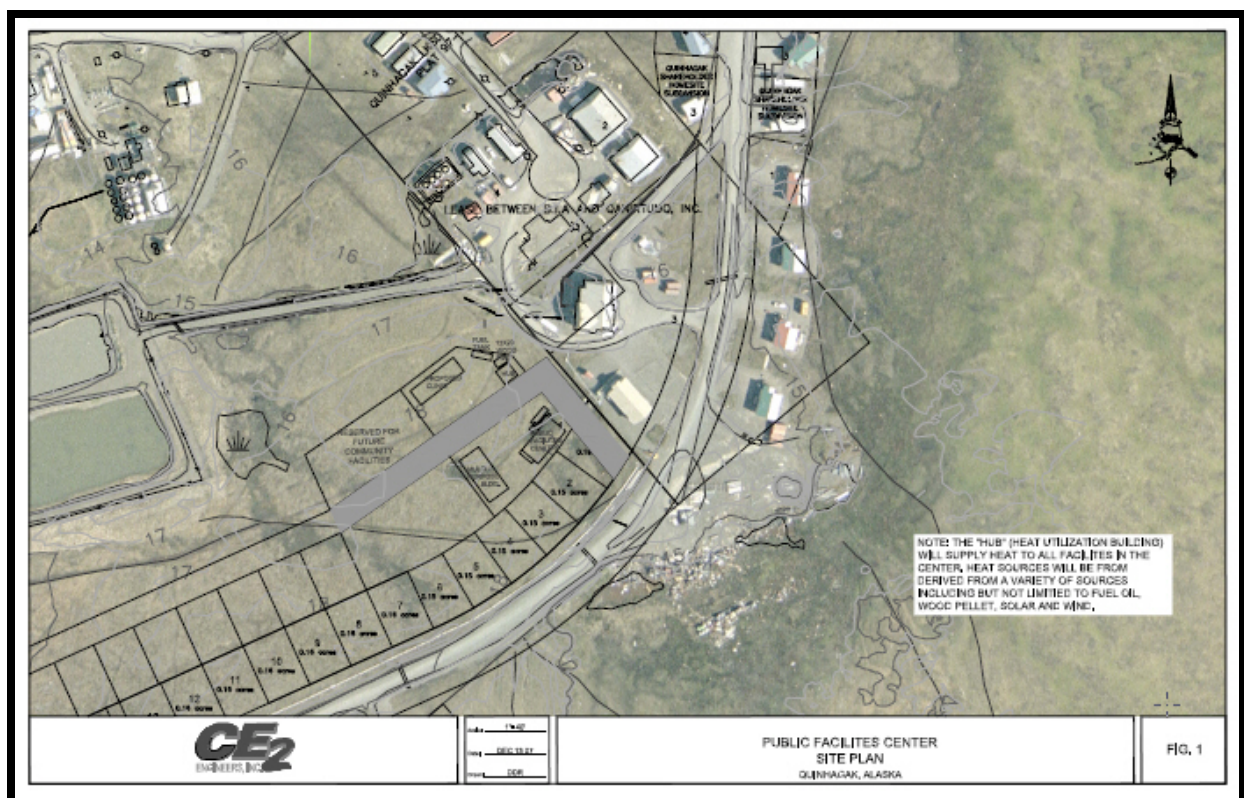
More Info:

Public Safety Site Plan Checklist

(<http://spreadsheetmeister.bizware.com/main.php?mode=edit&id=693>)

Quinhagak Land Use Plan 2008 (<http://kbmeister.bizware.com/urls/index.php?id=4959>)

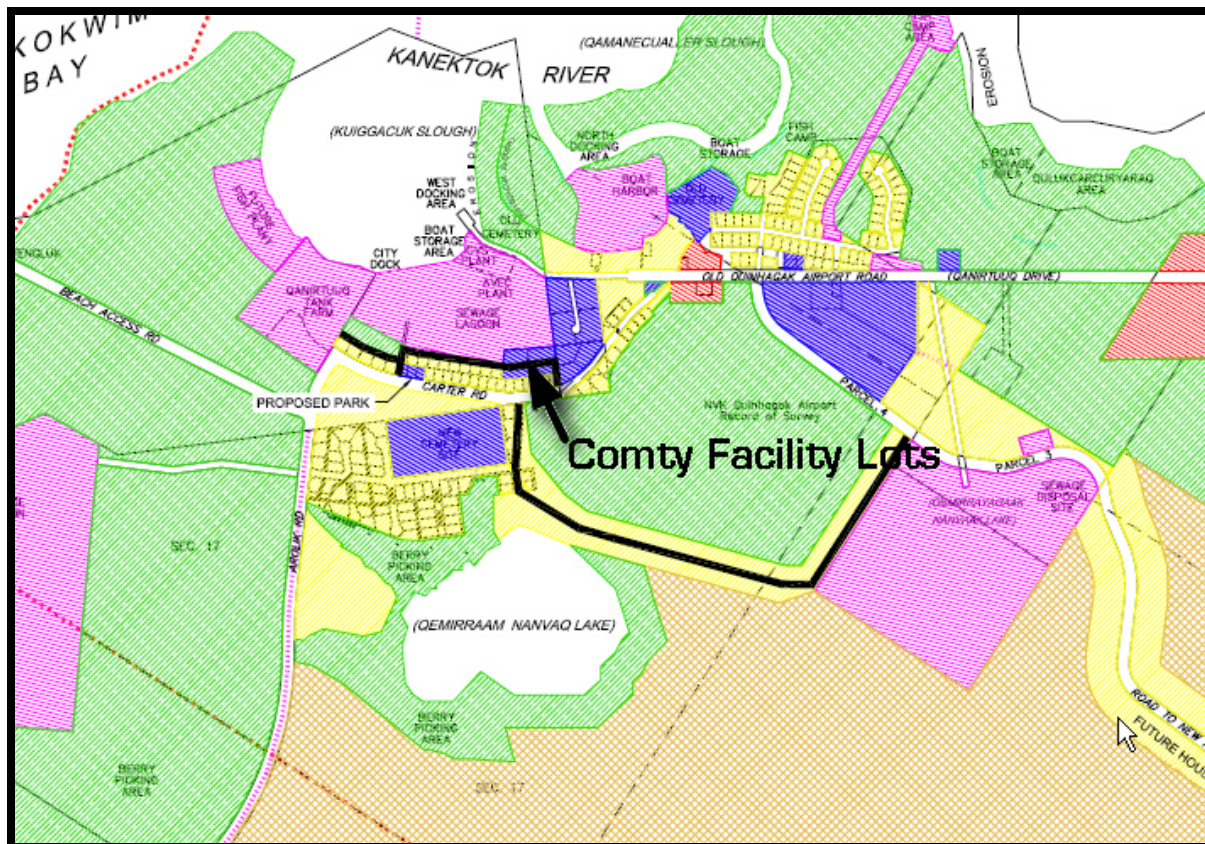
5.7. Site Plan



Community Facilities Site Plan/Campus

The community facilities site plan proposed as a result of this planning effort consists of two large tracts of land where community facilities will be co-located, and heated utilizing a centralized Heat Utility Building or HUB in order to reduce costs. Co-locating the facilities in a central area has other advantages, such as simplifying the environmental review process. Further, since the access road to the site is also needed for future housing, both the community facilities and housing will benefit from an investment of BIA IRR funding for access, site control, permitting, etc.

5.8. Conformance to Land Use Plan



The Quinhagak Land Use Plan color codes development zones, with blue being the community facilities zone. Two large parcels were carved out of the Moravian Church land to accommodate the community's long term community building land requirements, as well as provide for a 2nd row of housing along Carter Road. Suitable land is difficult to locate in the village, however, this area has been identified as being generally drier than other areas, although some drainage improvements are needed to the vicinity.

The Moravian Church has been contacted and has agreed in principle to transfer the land north of Carter Rd. to the Native Village of Kwinhagak for the purposes of developing residential housing lots and community facility lots.

5.9. Water, Sewer & Other Infrastructure

Water/Sewer System

The proposed facility is located within 150 feet of the water and sewer service areas currently under construction by CRW Engineering. The community sewer force main runs parallel to the lot, and the facility will further benefit due to its location adjacent to Carter Rd. Subdivisions 1 & 2, both of which are currently under development.

Refuse / Landfill System

Operator: NVK

System Characteristics:

- Collection - Centrally locked bins hauled by NVK
- Disposal - Solid waste dump and salvage area

As part of this project, funds should be budgeted to purchase an additional solid waste bin for the community facilities lot, as they are in short supply.

Electric Utility

Electric Utility Name: AVEC

Utility Operator: REA Co-op, City of Quinhagak

System Characteristics:

- Power Source - Diesel
- Capacity - 633 kilowatts
- Rate - 50 cents / kWh

The facility is within 1-2 power poles of access, and will be served with power as Carter Rd. Subdivisions 1 & 2 are developed during 2008/9.

Bulk Fuel

Due to the decline in Denali Commission funding, it is not clear whether Quinhagak will receive funds for a consolidate bulk fuel tank farm in the near future. AVEC, the Denali Commission's partner for development of bulk fuel tank facilities in Quinhagak, should be made aware of the plans for construction of additional facilities so that fuel storage needs can be adequately addressed for the long term.

Communications

In-State Phone: United Utilities Inc [being sold to GCI]

Long-Distance Phone: AT&T Alascom

5.10. Cost of Major Components

Quinhagak Public Safety Funding Strategy						
ITEM	COST	CVRF	CDBG	ICDBG	RASMUSON	DENALI
Design	\$128,000	\$62,500	\$65,500			
HUB	\$200,000	\$40,000				\$160,000
Public Safety	\$500,000			\$500,000		
Tribal Court	\$400,000				\$400,000	
Totals	\$1,228,000	\$102,500		\$500,000	\$400,000	\$400,000

A combined project planning, development, and construction cost of \$450/SF was used, based on 2,713 SF of construction and assuming 2008 dollars, including the capital costs for alternative energy. Construction costs continue to escalate, however, and should be addressed in any subsequent funding applications.

After completion of the business plan, the next step would be to secure design and permitting funds. The design should address Phase 1 and the expanded facility as part of the initial design [in other words, ***the design should not be phased***]. The City may want to consider securing matching funds from Coastal Villages Region Fund, and applying for a CDBG grant to pay for the design/permitting costs.

The HUB [Heat Utilization Building] will serve not just the Public Safety Building, but the future clinic, VPSO/Clinic housing, and Headstart buildings as well. Because it serves multiple functions, it may be possible to approach the HUB from multiple angles in terms of funding, either as an energy efficiency project, or as an adjunct to the clinic project.

6. Legal Authority and Issues

The City of Quinhagak (City) is the lead for this new facility project and the tribe, Native Village of Kwinhagak (NVK) is administering the project funds related to this business plan contract and will also be the administrator for future funds related to further development and construction of the new facility.

The City has the authority to provide public safety services to the community. Under an annual Memorandum of Agreement with the NVK, a consolidation of services was agreed upon to maximize the efficiency and savings for community services and to eliminate any duplication of services. This includes the maintenance and operation of the public safety services. This agreement describes that the NVK shall provide the community's public safety and law enforcement services and handle all bookkeeping and administer any state or restricted funds related to providing such services.

The Memorandum of Agreement does not dissolve the City as a governing body nor does it transfer ownership or title of any of the City's assets to the NVK. The City continues to function as a governing entity in the community and retains its legal obligation to perform the minimum requirements to retain its status as a 2nd Class City as described in the Alaska Statutes.

The Memorandum of Agreement is negotiated and renewed on an annual basis.

6.1. Ownership

The Memorandum of Agreement between the City of Quinhagak and the tribe, the Native Village of Kwinhagak does not transfer ownership or title of any of the City's assets to the NVK. The City continues to function as a governing entity in the community and retains its legal obligation to perform the minimum requirements to retain its status as a 2nd Class City as described in the Alaska Statutes.

The City as the lead for this project may assume ownership of the new Public Safety Facility as it is authorized to provide the public safety and law enforcement services for the community and under a Memorandum of Agreement negotiate a lease of facility and transfer the responsibility for providing the public safety and law enforcement services to the NVK.

More Info:

[Quinhagak 2007 Memorandum of Agreement](http://kbmeister.bizware.com/urls/index.php?id=4847)
(<http://kbmeister.bizware.com/urls/index.php?id=4847>)

6.2. Special Permits, Licenses and Regulations

Because federal funding will most likely be used to construct the public safety facility, the federal NEPA process must be followed.

Proposed actions require an appropriate NEPA process. There are three choices:

1. A categorical exclusion (CATEX) can be used when no significant impact on the natural or human environment can be easily demonstrated without the use of detailed analyses.
2. A environmental assessment (EA) which can used when analyses are required to demonstrate that the proposed action will not produce a significant impact on the natural or human environment. A finding of no significant impact (FONSI) is the final decision-making document.

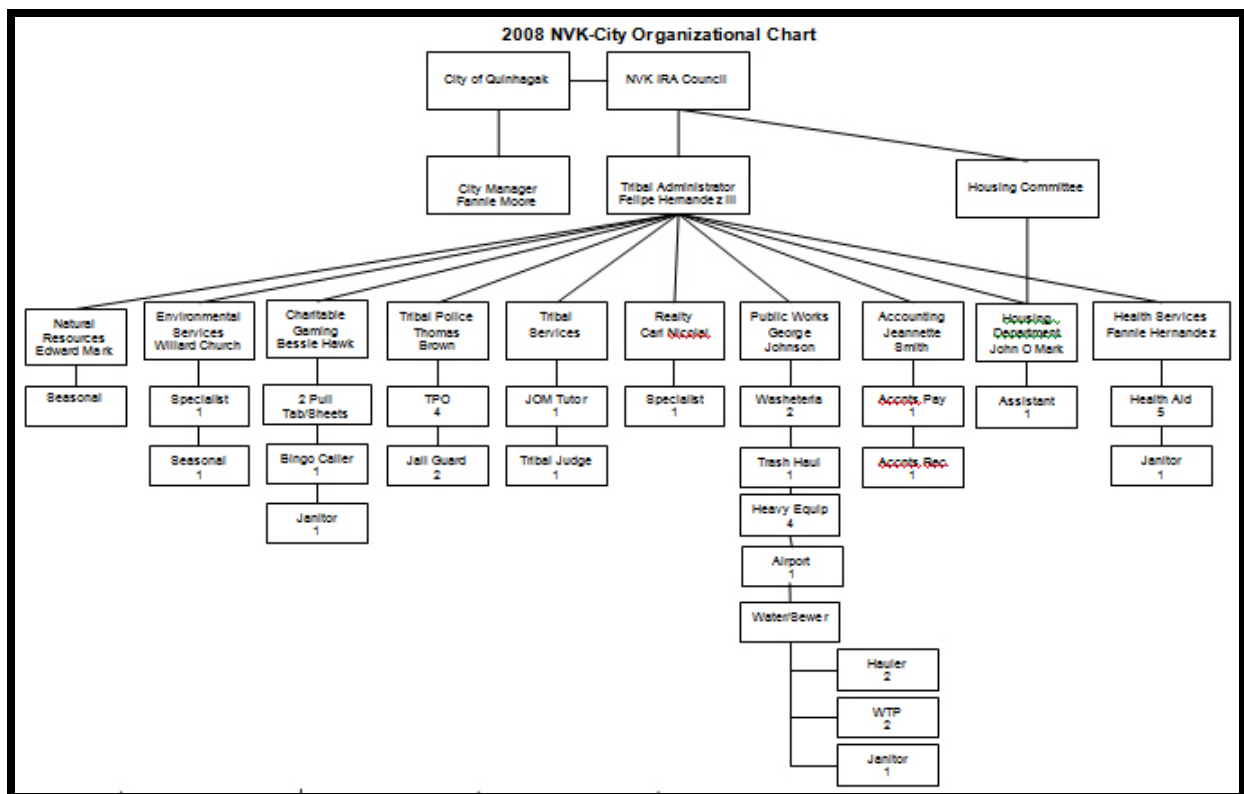
3. A environmental impact statement (EIS) must be used when the proposed action will produce a significant impact on the natural or human environment. The final decision-making document for an EIS is a record of decision (ROD). This is not likely to be required for this project.

In addition to the NEPA process, the project will have to undergo a Coastal Zone determination as the project lies in the Coastal Zone Management District.

During the design and permitting phase, the State Fire Marshall will also have to review the proposed construction documents. The review process may require modifications to the plans.

7. Management Structure

7.1. Municipal/Tribal Organizational Chart



7.2. Staffing and Training

In order for the City and Tribe to strengthen its project readiness capacity, staff involved in the development and subsequent administration of the new facility would

benefit from additional training as they move forward with the complex process of facility project development and then the future operation and maintenance of the facility. Such training could include: capacity building, building operations and maintenance, program management and even training to strengthen their law enforcement staff to be successful and supported in their positions as they provide this essential public safety service to the community. Some potential sources of funding for these types of training are:

The Administration for Native Americans is an excellent source of funding to build capacity, train key staff, and plan for future project development.

RuRAL CAP is another statewide non-profit that is active in community development capacity building, and may be a resource for the Tribe.

8. Summary of Financial Data

The following financial statements are based on an analysis of existing facility expenses as documented in the Native Village of Kwinhagak's annual general fund operating budget. Projected costs for utilities [fuel, electricity, water & sewer] are based on historical costs in Quinhagak. Savings due to more efficient [boilers, better insulation, etc.] have not been factored in. Efficiencies and savings realized from use of the Centralized Heat Utilization Building [HUB] have also not been factored in, as those savings will not be realized until economies of scale are achieved by adding additional facilities.

The financial statements assume build-out of the 2,713 SF Multi-purpose facility. In addition, the costs for operating Phase 1, the public safety side of the proposed facility, are listed to the far right, and are for the most part pro-rated at 67% of the 2,713 SF completed facility's expenses.

8.1. Expenses

8.1.1. Summary: Operations and Maintenance Costs

Operations and Maintenance Expenses: Summary

DESCRIPTION	TOTAL	PHASE 1 ONLY
Personnel	\$10,595	\$7,874
Utilities	\$13,288	\$9,009
Materials & Equipment	\$1,800	\$1,220
Other	\$3,750	\$2,543
TOTAL O&M Expenses	\$29,433	\$20,646

The **"Total"** column [also "Annual Cost"] for all financial statements shows the annual cost for the facility assuming 100% build-out of the multi-purpose facility @ 2,313 square feet, plus a separate outbuilding. The **Phase 1** column in the financials represents just the Public Safety Facility side of the building, or approximately 1,440 square feet, which the community has prioritized constructing.

8.1.2. Personnel Expenses

	DETAIL	UNIT	COST PER UNIT	UNITS PER YEAR	ANNUAL COST	PHASE 1 ONLY
	Facility Manager	Hourly	\$18	52	\$936	\$936
	Public Works	Hourly	\$15	52	\$780	\$780
	Custodial Personnel	Hourly	\$13	520	\$6,760	\$4,583
	Fringe @ 25%				\$2,119	\$1,575
				SUBTOTAL	\$10,595	\$7,874

The Facility Manager budget line item represents the prorated cost of the Tribal Administrator providing general administrative oversight of the facility. In reality, this function is 100% in-kind and the costs budgeted separately as part of the Tribe's Indirect Rate/Administrative Pool.

The Personnel Budget also includes prorated costs for the Public Works Director, a position that directly coordinates and supervises the NKV janitorial/maintenance personnel.

8.1.3. Utilities

EXPENSES	DETAIL	UNIT	COST PER UNIT	UNITS PER YEAR	ANNUAL COST	PHASE 1 ONLY
Utilities	Electric	Monthly	\$224	12	\$2,688	\$1,822
	Heating Fuel	Gallons	\$5	1,760	\$8,800	\$5,966
	Water/Sewer	Monthly	\$150	12	\$1,800	\$1,220
				SUBTOTAL	\$13,288	\$9,009

The utilities costs have been estimated assuming no efficiencies realized through economies of scale realized as a result of the Heat Utilization Building serving multiple community facilities. Fuel consumption has been estimated on the high side, while the trend has been for increasingly mild winters. Heating fuel landed in Quinhagak as of June, 2008 is costing the Tribe \$4.84/gallon wholesale [stove oil is retailing at more than \$7/gallon]. For purposes of the business plan, \$5/gallon has been budgeted.

A review of historical utility costs in Quinhagak, including a complete review of 2007/8 historical utility costs was completed, and is summarized in the following table:

FY2008 Current Utility Costs: Existing Quinhagak Facilities

Facility	SF	Electrical Costs @ \$0.50/kWh	Fuel Costs/Consumption @ \$3.22/Gallon [Spring 07 cost]
Bingo Hall	1,944	\$134.15/month	\$459.98/month or approximately 150 gallons/month or 1500 gallons @ 10 months
IRA Tribal Building	1,920	\$217/month	\$547/month or approximately 170 gallons/month or 1,700 gallons @ 10 months
Old Tribal Office	1,104	\$92.70/month	\$169.88/month or approximately 53 gallons/month or 530/gallons @ 10 months

Both the engineer's estimate of anticipated fuel consumption and the actual fuel consumption "on the ground" are consistent. The 1760 estimated gallons of consumption is conservative, and likely to exceed the actual gallons consumed.

Water and Sewer rates assume that the facility is connected to the Tribe's vacuum piped water/sewer system. Prior to that time, flush and haul will be used, which should cost 50% or less than the piped water/sewer cost.

More Info:

[FY09 Utility Cost Analysis](http://kbmeister.bizware.com/urls/index.php?id=5812) (<http://kbmeister.bizware.com/urls/index.php?id=5812>)

8.1.4. Materials Expenses

DETAIL	UNIT	COST PER UNIT	UNITS PER YEAR	ANNUAL COST	PHASE 1 ONLY
Maintenance & Repair Materials	Monthly	\$50	12	\$600	\$407
Custodial Supplies	Monthly	\$50	12	\$600	\$407
Office Materials and Supplies	Monthly	\$50	12	\$600	\$407
			SUBTOTAL	\$1,800	\$1,220

Materials & Equipment provides an allowance for monthly cleaning supplies and miscellaneous repair supplies.

8.1.5. Other Expenses

	ODETAIL	UNIT	COST PER UNIT	UNITS PER YEAR	ANNUAL COST	PHASE 1 ONLY
	Building Insurance	Annual	\$3,750	1	\$3,750	\$2,543
				SUBTOTAL	\$3,750	\$2,543

8.1.6. Capital Replacement Expenses

	DESCRIPTION	TOTAL	PHASE 1 ONLY
	Facility Cost	1,220,850	\$828,000
	Inflation Rate	3.54%	3.54%
	Expected Life in Years	40	40
	Future Value of Facility	\$4,908,951	\$3,329,329
	25% Capital Replacement Amount	\$1,227,238	\$832,332
	Expected Interest Rate	7.5%	7.5%
	Annual Capital Replacement Expense	\$5,400	\$3,663

8.1.7. Repair & Replacement Expenses

	DETAIL	QTY	COST	USEFUL LIFE [YRS]	ANNUAL COST	PHASE 1 ONLY
	Boilers & Furnaces	1	\$5,000	15	\$333	\$226
	Water Heaters	1	\$2,250	10	\$225	\$153
	Roofing	1	\$30,000	20	\$1,500	\$1,017
	Flooring	1	\$7,500	7	\$1,071	\$726
				SUBTOTAL	\$3,130	\$2,122

Repair and replacement expenses have been budgeted to allow for the routine replacement of essential operating systems after their normal useful life has expired due to wear and tear. Repair and replacement expenses should be set-aside annually in an interest-bearing account to cover future replacements. The "Annual Cost" is the amount that should be set-aside each year to this fund.

8.2. Revenues

DETAIL	Type	Monthly	# of Units	ANNUAL COST	PHASE 1 ONLY
Office of Children's Services	Lease	\$300	12	\$3,600	\$0
Overnight Accommodations	Rental	\$250	12	\$3,000	\$3,000
Indirect Cost Pool/Office of Self Governance Tribal Priority Allocations	Other	\$15,950	1	\$15,950	\$11,500
Municipal Revenue Sharing	Other	\$16,414	1	\$16,414	\$12,500
			SUBTOTAL	\$38,964	\$27,000

The primary source of revenue for maintaining and operating the facility will remain the current funding source for these costs, namely, municipal operating funds which are already appropriated on an annual basis to support the public safety facility. These funds are made available through an unconventional memorandum of agreement between the City and Tribe which consolidates the municipal and tribal administrations, reduces the City's overall administrative overhead, and frees those funds up for critical public functions such as Public Safety.

In addition, the Tribe, as a PL. 93-638 BIA [Bureau of Indian Affairs] contractor, is eligible for indirect costs and contract support costs required to administer the Tribe's federal contracts. As part of this process, the Tribe negotiates an annual so-called indirect rate, funds from which are used to pay the general administrative and facility expenses.

Fiscal Year	City Revenues & Donations to City	City Donations to Tribal Police	BIA Donations to Tribal Police	Tribal Police Revenues	Combined Tribal Police Revenues & Donations
2008	\$248,000.00	\$59,111.00	\$25,000.00	\$1,500.00	\$144,721.00
2007	\$209,153.00	\$54,998.00	\$26,717.00	\$1,500.00	\$169,059
2006	\$54,715.00	\$0.00	\$75,000.00	\$10,000.00	\$154,132.00
2005	\$138,847.00	\$32,559.00	\$63,500.00	\$12,000.00	\$179,587.00

More Info:

[FY2007 Audit Draft](http://kbmeister.bizware.com/urls/index.php?id=5883) (<http://kbmeister.bizware.com/urls/index.php?id=5883>)

[FY06 OMB a-133 audit NVK](http://kbmeister.bizware.com/urls/index.php?id=5881) (<http://kbmeister.bizware.com/urls/index.php?id=5881>)

8.3. Net Income

	NET INCOME		
	REVENUES	COMPLETE FACILITY	PHASE 1 ONLY
	Lease Revenue	\$3,600	\$0
	Rental Revenue	\$3,000	\$3,000
	Other Revenue	\$32,364	\$24,000
	TOTAL REVENUE	\$38,964	\$27,000

	EXPENSES	COMPLETE FACILITY	PHASE 1 ONLY
	Operation & Maintenance Expenses	\$29,433	\$20,646
	Renewal & Replacement	\$3,130	\$2,122
	Capital Replacement	\$5,400	\$3,663
	TOTAL EXPENSES	\$37,963	\$26,431
	NET INCOME	\$1,001	\$569

More Info:

[Public Safety Business Plan Spreadseets](http://spreadsheetmeister.bizware.com/main.php?mode=edit&id=745)

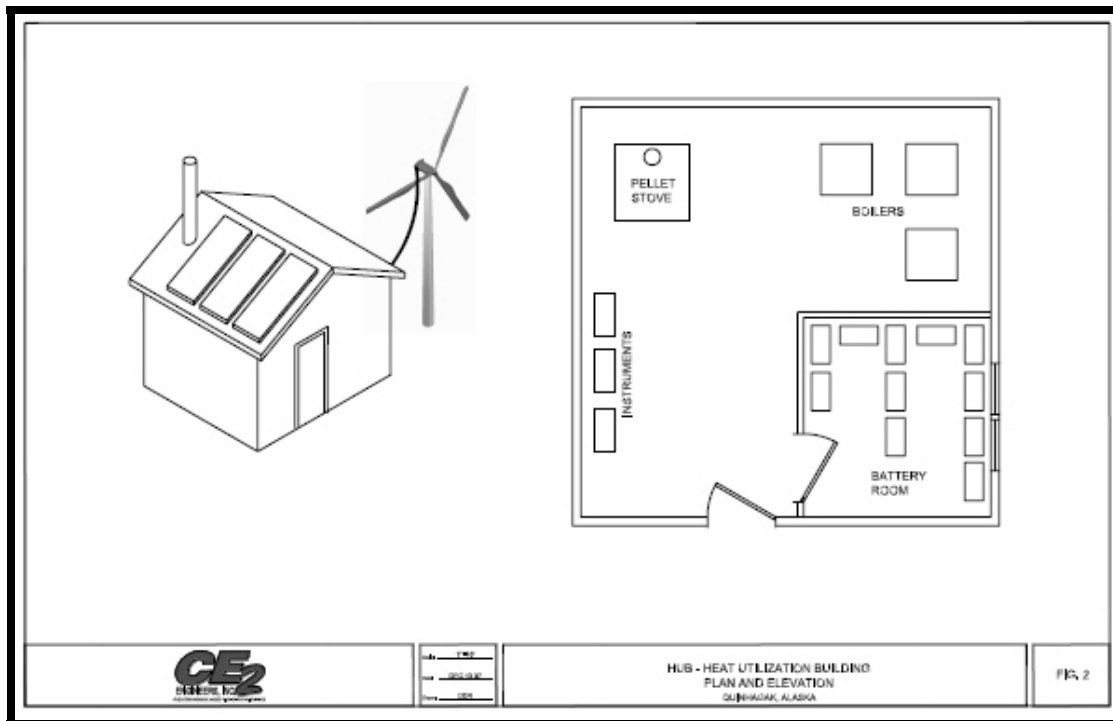
(<http://spreadsheetmeister.bizware.com/main.php?mode=edit&id=745>)

8.4. Pillars of Sustainability

UNITY

The merged operations of the City of Quinhagak and the Native Village of Kwinhagak offer the best hope for ensuring that limited local discretionary funds are maximized to sustain the operations of existing and new infrastructure the community brings on line. With revenue sharing being restored, the merger ensures that more than 2/3'rds of the revenue sharing received by the community is available for public services and functions, including facility maintenance and operations.

CO-LOCATION OF COMMUNITY FACILITIES:

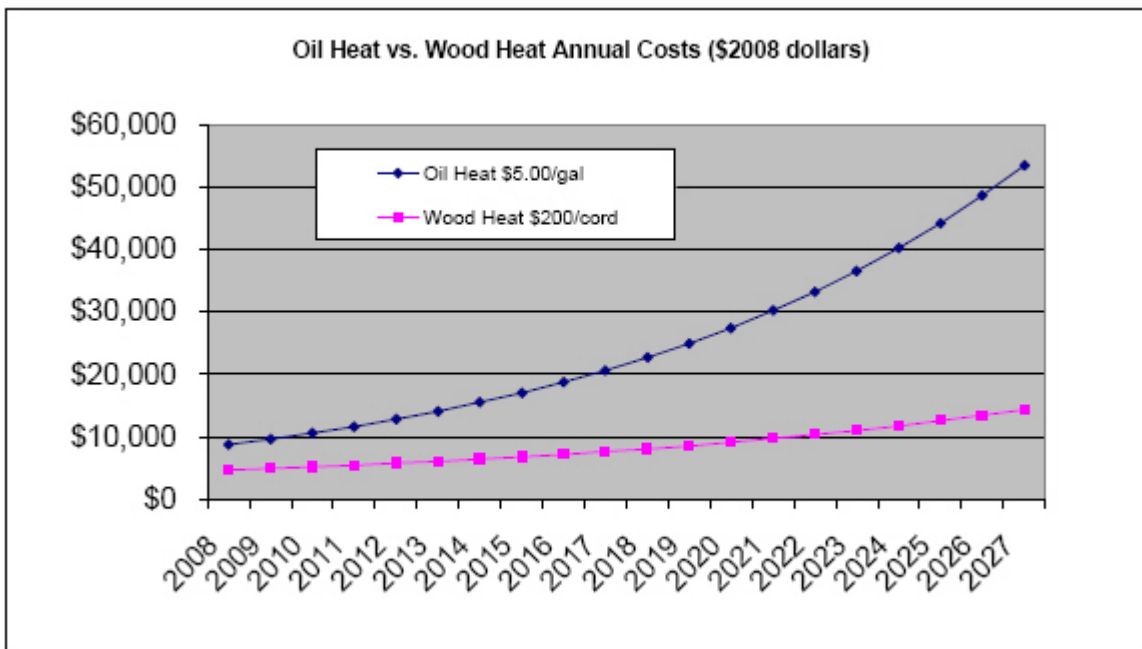


While it is desirable to consolidate services and programs under one roof, bigger is not always better in terms of efficiency and long term operating costs. Quinhagak is located in a "warm permafrost zone," meaning that standard arctic foundation systems are not always reliable and settlement/shifting is a given. Small buildings are easier to level. However, operating costs can still be reduced if buildings are co-located and served by central heating and mechanical systems run in a series on the same glycol loop, and that is the approach that has been opted for in Quinhagak. Consequently, all future proposed facilities have been allocated land in a new community facilities core, including the proposed Public Safety building, in order to share common mechanical systems to the extent feasible. This also mitigates the fire risk, by locating a primary source of ignition outside the building.

APPROPRIATE SCALE:

By planning projects that are appropriately scaled and that allow for the essential functions rather than a community wish list, overall construction costs can be reduced as will long-term operating costs.

ALTERNATIVE ENERGY STRATEGIES:



This business plan does not assume that alternative energy strategies will be implemented to cover operating costs on Day 1 of the grand opening of the facility. It does, however, assume that these technologies will be implemented and it allows for their integration via the Heat Utilization Building or HUB.

Even in the absence of alternative energy, there will be efficiencies realized by utilizing multiple diesel powered boilers in a series, and those efficiencies will be realized as more facilities are connected to the centralized mechanical systems (future clinic, future community building).

The HUB will also contain at least one (1) **wood-fired boiler** to take advantage of locally available driftwood and other wood resources in the Kanektok drainage area. An economic analysis completed by CE2 Engineers, Inc. demonstrates that augmenting, and to the extent possible, supplanting, diesel generated heat with wood-generated heat can result in substantial long terms savings. The above analysis of savings assumes the supply of 17 cords of wood annually, at a cost of \$200/cord, and fuel at \$5/gallon, a 30% moisture content in the wood, and that daily stoking of the boiler will be completed by maintenance staff already budgeted for separately in the business plan's Personnel section:

In addition, solar heating panels could be added to the HUB to provide solar generated heat to the glycol loops during the heating months.

Any new facility constructed in Quinhagak should comply with the Alaska Building Energy Efficiency Standard (BEES) which was established by the State of Alaska to

promote the construction of energy-efficient buildings. It sets standards for thermal resistance, air leakage, moisture protection, and ventilation as they relate to efficient use of energy in buildings.

All new community-owned buildings which began construction on or after January 1, 1992 must comply with BEES if AHFC or other State financial assistance of any kind is to be used in its construction or the purchase of a loan.

Thermal compliance with BEES may be met using a prescriptive method, but is most often shown by using the Energy Rating Method (performed by an energy rater using AkWarm computer software), which requires an energy rating of 4 Star Plus or higher. (An Energy Efficiency Interest Rate Reduction (EEIRR) is available for homes with an energy rating of 5 Star and 5 Star Plus).

BEES also has indoor air ventilation requirements which are met with mechanical ventilation systems such as properly sized & installed continuous duty exhaust fans or heat recovery ventilators or other designs.

Depending on the method used, compliance may be certified by an energy rater, a licensed architect, engineer, State of Alaska licensed new home inspector, contractor, building owner or mechanical contractor (ventilation only) if they meet BEES Compliance Certification requirements.

More Info:

[Apricus Solar Heating System](http://www.apricus.com/) (<http://www.apricus.com/>)

[Garn Wood Burning Boilers](http://garn.com/content/Products.aspx) (<http://garn.com/content/Products.aspx>)

[Garn Wood Fired Boiler: Economic Analysis](http://kbmeister.bizware.com/urls/index.php?id=5863)
(<http://kbmeister.bizware.com/urls/index.php?id=5863>)

[Alaska Building Energy Efficiency Standard \[AHFC\]](http://www.ahfc.state.ak.us/reference/bees.cfm)
(<http://www.ahfc.state.ak.us/reference/bees.cfm>)

9. Project Readiness

9.1. Project Readiness Table

Municipal Compliance

Municipal Compliance Factors		CURRENT STATUS
Personnel, Finance, Property, and Procurement Policies & Procedures Adopted		N/A
Finance & Procurement Systems Certified by CPA		N/A
City: Annual Budget adopted and tracked using fund accounting software		YES
City: Positive cash flow, and positive unrestricted fund balance		YES
City: Minimal changeover in key personnel (Administrator & Chief Financial Officer) in last 12 months		YES
City: Relationship with a financial institution and ability to secure a line of credit or loan for at least \$100,000 for project cash flow		YES
If expended in excess of \$500k, OMB A-133 Audit is in Progress/Current		Audit in Progress
City: No federal debts, including no IRS back-taxes		No Back Taxes

More Info:

[Tribe Project Compliance Municipal Compliance](http://spreadsheetmeister.bizware.com/main.php?mode=edit&id=707)
(<http://spreadsheetmeister.bizware.com/main.php?mode=edit&id=707>)

Project Compliance

Project Readiness Factors		CURRENT STATUS
Tribe: Project Checking Account Established for Project		NO
Tribe: 3rd Party Project Accountant Identified or Solicited		Being Solicited Now
Business Plan		In Process
Site Control		NO
Site Plan		NO
Design		NO
Fire Marshall Approval		NO
Cost Estimate & Global Project Budget		NO
Coastal Zone Determination		NO

SHPO/NEPA Completed	NO
Matching Funds Identified	NO
Construction Funding in Place	NO
Procurement	NO

More Info:

[Tribe Project Compliance Project Compliance](http://spreadsheetmeister.bizware.com/main.php?mode=edit&id=706)

(<http://spreadsheetmeister.bizware.com/main.php?mode=edit&id=706>)

Tribal Compliance Table

Tribal Compliance Factors	CURRENT STATUS
Personnel, Finance, Property, and Procurement Policies & Procedures Adopted	YES
Finance & Procurement Systems Certified by CPA	YES
Tribe: Annual Budget adopted and tracked using fund accounting software	YES
Tribe: Positive cash flow, and positive unrestricted fund balance	Possibly
Tribe: Minimal changeover in key personnel (Tribal Administrator & Chief Financial Officer) in last 12 months	YES, Stable
Tribe: Relationship with a financial institution and ability to secure a line of credit or loan for at least \$100,000 for project cash flow	YES
If expended in excess of \$500k, OMB A-133 Audit is in Progress/Current	Audit in Progress
Tribe: No federal debts, including no IRS back-taxes	Current with IRS

More info:

[Tribe Project Compliance Tribal Compliance](http://spreadsheetmeister.bizware.com/main.php?mode=edit&id=705)

(<http://spreadsheetmeister.bizware.com/main.php?mode=edit&id=705>)

9.2. Next Steps

NEXT STEPS					
NAME	DESCRIPTION	LEAD	DUE	STATUS	
Site Control	Transfer Moravian Land to Tribe	Felipe Hernandez	8/30/2008	PENDING	
Matching Funds	Determine availability of matching funds with CVRF	Fannie Moore	9/30/2008	PENDING	
Design / Specs	Allocate funds for development of building specs OR pursue design funds	Fannie Moore	9/30/2008	PENDING	
Funding	Pursue CDBG funds for design [if stick-built] or supply [if modular]	Fannie Moore	11/30/2008	PENDING	

More Info:

[Public Safety Next Steps](#)

(<http://spreadsheetmeister.bizware.com/main.php?mode=edit&id=764>)

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Appendices

Appendix 1. Quinhagak NVK – City MOA 2007

CITY OF QUINHAGAK
P.O. BOX 90
QUINHAGAK, ALASKA 99655
(907) 556-8202

&

THE NATIVE VILLAGE OF KWINHAGAK, QUINHAGAK I.R.A. COUNCIL
GENERAL DELIVERY
QUINHAGAK, ALASKA 99655
(907) 556-8167 & 8165

Memorandum of Agreement
between

THE CITY OF QUINHAGAK

and

THE NATIVE VILLAGE OF KWINHAGAK
QUINHAGAK I.R.A. COUNCIL

to transfer maintenance and operation of all remaining City services to the IRA and consolidate the IRA/CITY administrations into one with the IRA providing bookkeeping and administration services for all CITY restricted funds (Municipal Assistance/Revenue Sharing, etc.)

1. Purpose:

The purpose of this MOA is to enable the City to contract with NVK for the maintenance and operation of all remaining City services and functions, including but not limited to: water/sewer, fire protection, public safety, roads, and the power plant. NVK shall also do the bookkeeping for and administer any restricted State funds the City may have, such as Revenue Sharing, thereby consolidating the City and Tribal Administrations into one accounting system for maximum efficiency and savings. The City will budget and control the expenditure of Municipal Assistance/Revenue Sharing and other restricted funds.

This MOA does not "dissolve" the City though, nor does this MOA transfer ownership and title of the City's assets to NVK.

2. Period of Performance:

This MOA will be in effect starting Jan. 12, 2007, and terminate on July 1, 2008. A negotiation for continuation will be done prior to June 30, 2008.

3. Roles:

A. ROLE OF THE CITY: The City of Quinhagak shall continue to function as a body under the MOA and perform the minimum requirements spelled out in the Alaska Statutes to retain the status of 2nd Class City status, including:

- 1) Meeting regularly including joint special meetings with the IRA.
- 2) Conducting municipal elections.
- 3) Developing and passing a municipal budget ordinance (including Municipal Assistance and Revenue Sharing Funds), reviewing monthly financial statements to ensure municipal funds are spent correctly and amending the budget if there are significant changes in municipal revenues or expenditures.
- 4) Applying for additional State funds the City may be eligible for.
- 5) For City grants, the City remains the legal grantee of record and is ultimately responsible for all performance and proper use of funds.
- 6) Approve the selection of a City Coordinator/City Clerk combined part-time position who works under the direction of the City, and whose duties shall include reporting to the City Council, coordinating their elections, and meetings, applying for State grants, and coordinating the transfer of funds from the City to the IRA.
- 7) Cooperative management of all basic services included in the MOA in conjunction with the IRA, as well as participate equally in the hiring of department heads that the City jointly funds.
- 8) Further, the City shall continue to control the sale, disposal, and use of all City Lands in accordance with the City's land ordinance.
- 9) When necessary, adopt mutually acceptable ordinances governing subject matter outside of and not conflicting with the scope or jurisdiction of the Tribal Court or Tribe.
- 10) If applicable, will not levy property tax within the municipality of Quinhagak.

B. ROLE OF NATIVE VILLAGE OF KWINHAGAK: The Native Village of Kwinhagak shall administer City funds and, if necessary at NVK's option, provide municipal services.

4. Responsibilities:

- A. **City Contracts with NVK for services:** THE CITY OF QUINHAGAK (CITY) hereby contracts with the Native Village of Kwinhagak (NVK) for the operation, maintenance, and use of all Municipal services the City operates and all property and equipment described in schedule "A." These services shall include but not be limited to: water and sewer, public safety, roads, power plant, and fire protection. All property and equipment described in schedule "A" shall be referred to as "Premises."
- B. **City Contracts with NVK for administration:** THE CITY further contracts with NVK to provide bookkeeping services and administration of any restricted State or Federal funds the CITY may have, including but not limited to: Municipal Assistance/Revenue Sharing, CITY sales taxes and the COPS FAST grant. All City revenue and expenditures will be reported in accordance with the Municipal-Tribal jointly adopted operating budget. The NVK accepts no liability or responsibility for disallowed costs (unauthorized use of restricted/grant funds) incurred prior to the effective start date of the 1996 MOA.
- C. **Financial Status Reports:** Financial Status reports and other required reporting of these funds will be provided to the CITY Council at the same time financial reports are submitted to NVK (monthly), and to the State/Federal Government as required.
- D. **Combined Fund Accounts:** General Fund services paid for from discretionary monies will be tracked using fund accounts for the City and IRA based on the adopted operating budgets. Each fund will show the City's contribution for that service as net operating income (NOI). NVK will not spend more money on the service than budgeted by the City.
- E. **Prior City Debts:** NVK will not assume liability for any prior debts the City has incurred. The City is responsible for repaying their prior debts. However, in the interest of ensuring an orderly transfer of services as well as vendor accounts, and at the sole discretion of NVK, NVK will pay those debts, liabilities, and accounts payable from its own revenue sources that NVK deems reasonable including any outstanding payroll taxes. NVK shall work to have all CITY vendor accounts transferred to the NVK. NVK and the CITY shall work together to resolve any outstanding liabilities the CITY has incurred.
- F. **AVEC Power Plant:** The AVEC power plant contract will remain in the City's name but be administered by NVK.
- G. **Law Enforcement:** THE CITY hereby contracts with NVK to provide law enforcement protection services. NVK is authorized to use the CITY's COPS FAST grant funds and authorizes NVK to draw down funds as necessary and in compliance with the regulations of the grant and the Municipal budget. NVK Tribal Police are authorized to enforce all municipal laws, and ordinances in the same capacity as Village Police Officer's or City Police both within the City limits for all municipal ordinances and outside of the City limits for enforcement of the City's water, and land nuisance ordinances, and other ordinances enforceable outside the City's limits.

- H. Stewardship over Municipal Lands: THE CITY contracts with NVK to provide stewardship over all CITY lands such as the dump using the facilities and equipment in this MOA (i.e. heavy equipment).
- I. Utility Board: The Quinhagak Utility Board shall continue to operate and Board members shall complete their term, except that the Board will report to the I.R.A. Council and the City of Quinhagak.
- J. Liability Insurance: NVK agrees to purchase general liability insurance to protect the Premises and the CITY/NVK from liability suits. To reduce the cost of liability insurance, NVK shall modify its Scopes of Work in its federal contracts to include as many as the services as possible so that liability for those services is covered under the Federal Tort Claims Act.
- K. Non-discrimination: NVK agrees to provide services previously operated by the CITY equally to tribal and non-tribal members.
- L. Joint Meetings: Designated special meetings shall be joint meetings.
- M. Employer Identification Number: One employer identification number will be used for the joint CITY-NVK Administration.
- N. Single Organization-Wide Audit: One single, organization-wide audit will be conducted for both the CITY and NVK when required with the CITY's funds broken out and identified as municipal programs.

5. Disputes:

Any disputes arising under the MOA between the CITY and NVK shall be adjudicated in the Native Village of Kwinhagak Tribal Court, which has authority to review Tribal Council actions. All decisions of the Court shall be binding, including the award of disallowed costs to the CITY. In addition, each party is obligated to respond to suggestions from the other party pertaining to municipal service delivery under the MOA.

6. Resolution of Complaints and Appeals pertaining to Service Delivery:

Complaints by non-tribal members as well as tribal members pertaining to general service delivery under the MOA should first be directed to the Tribal Administrator within 30 days of the incident. If the Tribal Administrator cannot provide an informal resolution to the problem within 3 days then the individual shall have the right to appeal to the Appeals Board, which shall consist of three IRA and City Council members, with at least one from both Councils present. If the Appeals Board cannot resolve the matter, then the individual has the right to appeal to the full board, which shall include a quorum of City and IRA Council members. Decisions of the Appeals Board and the full board shall be final.

7. Meeting Minutes:

One set of meeting minutes will be maintained for the City and Tribe for all regular, special and joint special meetings rather than two sets.

8. Meeting Agenda:

- A. Regular Meetings: Will be conducted separately with separate agendas.

- B. **Special Meetings:** Agendas will be broken up into NVK, City, and Joint business. The President of the NVK shall chair during NVK's agenda items; the Mayor shall chair during the City's agenda items; and the Mayor and President shall alternate chairing the Joint business items. The Councils shall approve the agenda at the beginning of the meeting and recommend corrections to the agenda as necessary. The Councils shall have the final say with regards to whether an agenda item should be classified as City, NVK, or Joint.

City Agenda Items: City agenda items shall consist of all items which only the City has the legal authority to act on, including municipal ordinances, hiring of the City Clerk, etc. NVK shall participate in the discussion of City agenda items. The City and NVK shall strive to achieve consensus on all items.

NVK Agenda Items: NVK Agenda items shall consist of all items which only the NVK has the legal authority to act on, including tribal adoptions, tribal ordinances, appointment of Chief Justices and Tribal Court Judges, etc. The City shall participate in the discussion of all NVK agenda items. The City and NVK shall strive to achieve a consensus on all items.

Joint Business Items: As many agenda items as possible should fall under joint business. During joint business items, the City and Tribe shall act as one body, and shall vote on items as one body with majority ruling. For purposes of joint business items, a majority shall consist of a majority of all City and NVK Council members present. Motions can be made by either City or NVK Council members. Joint Agenda items include: passing joint resolutions in support of either tribal or municipal grants; hiring/removing the department heads jointly funded; serving as a joint appeals board; etc.

9. **Meeting Compensation:**

- A. **Regular Meetings:** Council conducting the meeting receive stipends.
- B. **Special Meetings:** Stipend is paid to the Council conducting the business. In cases of Joint Special Meetings, both Councils receive stipends.
- C. **Travel Stipends:** Council members selected to represent the City or the NVK Council will receive a stipend for each meeting day.
- D. **Work Sessions:** The Council Members participating in a work session receive compensation as prearranged at an hourly rate.

10. **Standards of Conduct for Municipal-Tribal Officials:**

As leaders of the community, all municipal and tribal officials shall abide by the laws and regulations of the City and Tribe or face possible removal from the Council.

11. **Use:**

NVK shall use the Premises in a lawful and proper manner and shall comply with all applicable laws and regulations related to the use or maintenance of the Premises.

12. **Location:**

The Premises is located at Quinhagak, Alaska and shall not be removed from Quinhagak. The City will retain the administration office and for administration of the City.

13. Contractor's Inspection:

NVK acknowledges that it has fully inspected the Premises, that the Premises and their conditions are listed in Section A next to the item, and that NVK has accepted the Premises as is.

14. Major Alterations:

With City Council's approval, NVK is authorized to make any and all alterations, additions, or improvements to the Premises as necessary to ensure continuous operations.

15. Repairs:

Provided that the funds are available, NVK shall, at each department or fund's expense, keep the Premises in decent repair, condition, and working order and shall furnish all parts, mechanisms, and devices to keep the Premises in good working order.

16. Liens:

NVK shall keep the Premises free and clear of all levies, liens, and encumbrances, and shall pay all appropriate license fees, registration fees, assessments, charges, and other costs that may now or hereafter be imposed upon the use of the Premises.

17. Warranties:

The CITY makes no warranties, either expressed or implied, nor shall any warranties arise by operation of law, as to any matter, including without limitation the condition of the Premises, its merchantability, or its fitness for any particular purpose.

18. Indemnity:

NVK shall indemnify and defend the CITY against and hold the CITY harmless from any and all claims, actions, suits, proceedings, costs, expenses, damages, and liabilities, including attorney's fees, arising out of, connected with or resulting from the use, operation, maintenance, or repair of the Premises by NVK during the term of the contract.

19. Assignment:

NVK shall not assign, transfer, or pledge this MOA contract, the Premises or any part thereof, or any interest therein without the prior written consent of the City.

20. Ownership:

The Premises is and shall remain the property of the CITY. This MOA does not constitute ownership.

21. Entire Agreement:

This MOA contract together with any other written instrument executed by the CITY and NVK is the entire agreement. The agreement shall not be amended, altered, changed, except by written agreement signed by both parties.

22. Severability:

If any provision of this MOA contract is held invalid, that provision shall be severed from the agreement without invalidating the entire agreement.

23. Notices:

Service of all notices under this agreement shall be sufficient if in writing and given personally or mailed to the party involved at his address. Any notice mailed to the party's address shall be deemed accepted when deposited in the United States mail, clearly addressed, and with postage prepaid.

24. Survival of Covenants:

Whenever the context permits, the NVK promises under this MOA contract shall survive the delivery and return of the Premises hereunder.

25. Headings:

Paragraph headings contained herein shall not govern, limit, modify, or affect the scope, meaning, or intent of the provisions of this MOA contract.

IN WITNESS WHEREOF, the parties have executed this MOA contract on Jan. 12, 2007 and provide for an effective date to begin the contract as of Jan. 12, 2007.

Grace L. Hill

Honorable Mayor, CITY of Quinhagak

Quintus White

Secretary, CITY of Quinhagak

Wanika Banilla

The President, Native Village of Kwinhagak

Frank B. Fox for Denise Cleveland

Secretary, Native Village of Kwinhagak

SECTION A

LIST OF THE PREMISES

Updated Jan. 12, 2007

Old Washeteria Building	poor
Backup diesel generator (now in new WTP)	excellent
Water lines	fair
Summer transmission lines to fish plant	poor
New Water Treatment Plant	good
Sewage Haul trailer	poor
Water Haul trailer	good
Honeybucket hoppers w/ repair materials	poor
White dump truck	fair
Red dump truck	poor
Old excavator	fair
Old bulldozer	fair
JD loader (K23)	sold to Eads
New loader	good
Cat	good
crane	fair
Fire Station - now storage building	poor
Fire Truck	not in use
Public safety building	poor
City Office Building (Apartment 1/2005)	Need Renovation
Stove oil and gas tanks	Good
City dump	poor
City dock	good (some erosion)
Small Boat harbor	good (need dredging)
Boardwalks	poor (replaced w/gravel)
City roads	fair
New Washeteria	good
Old Clinic Building (Apt./Duplex)	Need minor repairs

Appendix 2. NVK – AVCP MOA

MEMORANDUM OF AGREEMENT

THIS MEMORANDUM OF AGREEMENT is entered by and between, the Association of Village Council Presidents (AVCP), of Pouch 219, Bethel, Alaska 99559, herein called "AVCP", and City of Quinhagak of Quinhagak, Alaska, herein called "Sponsoring Community," for the purpose of the VPSO Program.

RECITALS

1. VILLAGE PUBLIC SAFETY OFFICER.

A) IT IS HEREBY AGREED, that AVCP VPSO Program will employ, and the Community Council will accept, a Village Public Safety Officer (VPSO) in the Community of Quinhagak, Alaska. The VPSO Program is operated by AVCP through a yearly grant from the State of Alaska.

B) IT IS FURTHER AGREED, that the Sponsoring Community accepts the powers, duties of the VPSO, and will encourage and support, the enforcement of the laws of the State of Alaska.

C) IT IS FURTHER AGREED, that the Community Council will maintain and repair any and/or all vehicles assigned to the VPSO. The assigned vehicle(s) will be kept by the VPSO by his/her place of residence for prompt emergency response purposes.

2. SUPERVISION AND WORK SCHEDULE

A) IT IS HEREBY AGREED, that VPSO Coordinator will be the immediate supervisor. The Sponsoring Community shall be the supervisor within the community. The Sponsoring Community shall determine the work schedule of the VPSO in accordance with needs and conditions of the community.

B) IT IS FURTHER AGREED, that the VPSO's work day shall not exceed seven and one half (7.5) hours, nor shall the VPSO's work week exceed 37.5 hours, with two (2) consecutive days off. Any overtime worked by the VPSO which generated a State case number, will be paid by AVCP VPSO Program. Any overtime without a state case number will be paid by the Sponsoring Community.

C) IT IS FURTHER AGREED, that the VPSO shall be put on Temporary Duty Assignment as needed, by request from the VPSO Coordinator, within AVCP's Region.

D) IT IS FURTHER AGREED, that as an employee of AVCP, the VPSO has the benefit of, and is subject to the Personnel Policies and Administrative Rules and Procedures of AVCP, except to the extent that those Policies, Rules and Procedures, may be superseded by the VPSO Program Grant.

3. FIREARMS POLICY.

A) IT IS HEREBY AGREED, that in accordance with the, VPSO Program Grant, a VPSO will not, except in an emergency, permit to carry a gun in the performance of the officer's duties; or supervise or direct an individual who carries a gun.

4. OFFICE SPACE.

A) **IT IS HEREBY AGREED**, that the Sponsoring Community shall provide for the VPSO's office space, which includes; heat, electricity, telephone with long distance service, fax line, internet service and janitorial services.

B) **IT IS HEREBY AGREED**, that the Sponsoring Community shall provide for the VPSO's a place to temporarily hold individuals under arrest.

5. TERMS.

A) **IT IS HEREBY AGREED**, that the terms of this agreement, between AVCP VPSO Program and the Sponsoring Community, shall be effective from the date signed for a one year term from the date signed.

6. MODIFICATION.

A) **IT IS HEREBY AGREED**, that this Agreement constitutes the entire agreement between the parties and may be modified or altered only in writing, signed by AVCP hereto, or by authorized representatives. This, Memorandum of Agreement may be terminated by AVCP at any time.

Wendie Smille
Signature

Dassilie Baville
Printed Name

IBA President
Title

IBA Council
Name of Traditional Council

9/11/07
Date

Grace L. Hill
Signature

Grace L. Hill
Printed Name

Mayer
Title

Quinhasset City Council
Name of City Council

8/14/07
Date

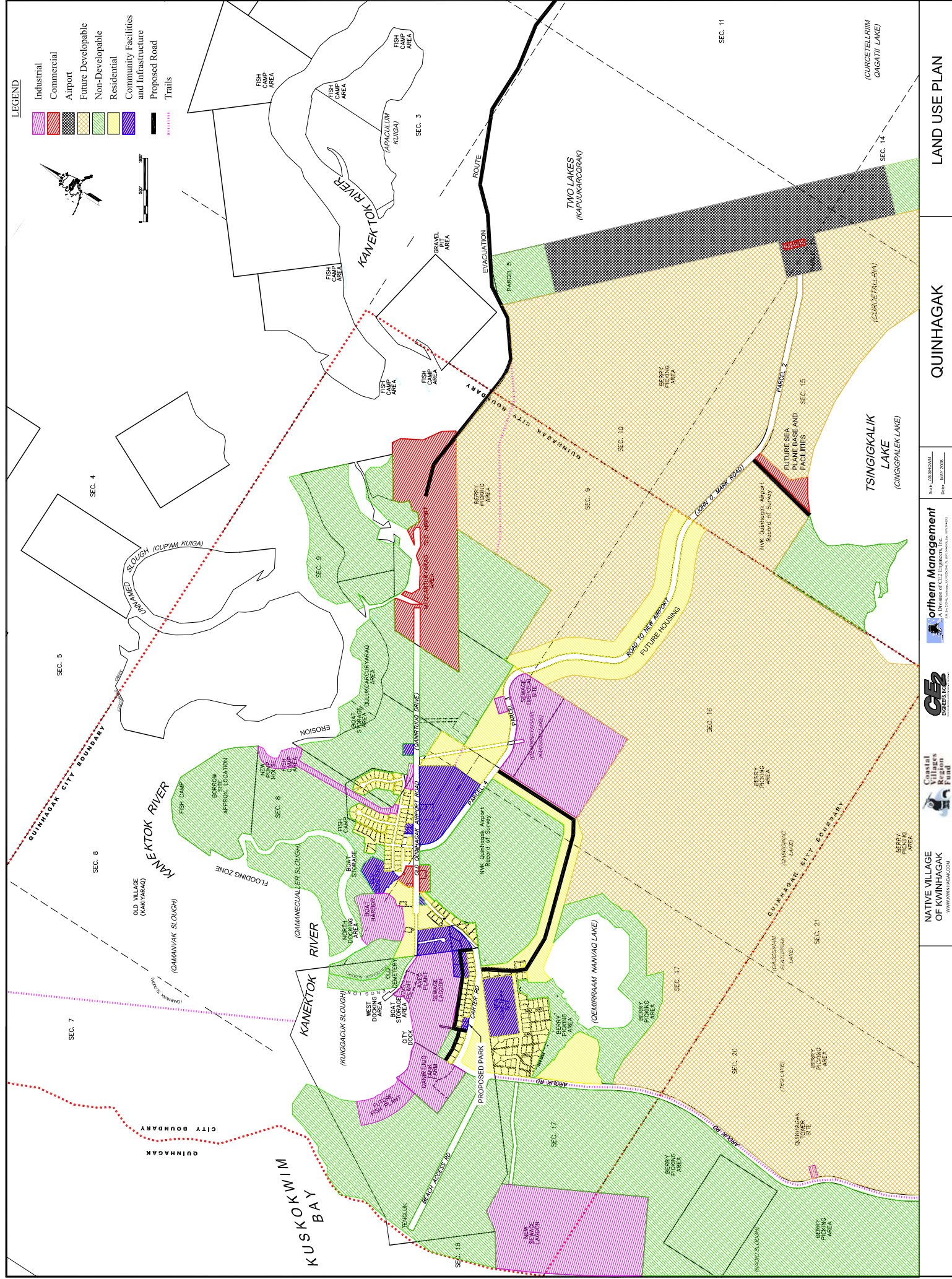
Myron P. Naneng Sr.
Signature

Myron P. Naneng Sr.
Printed Name

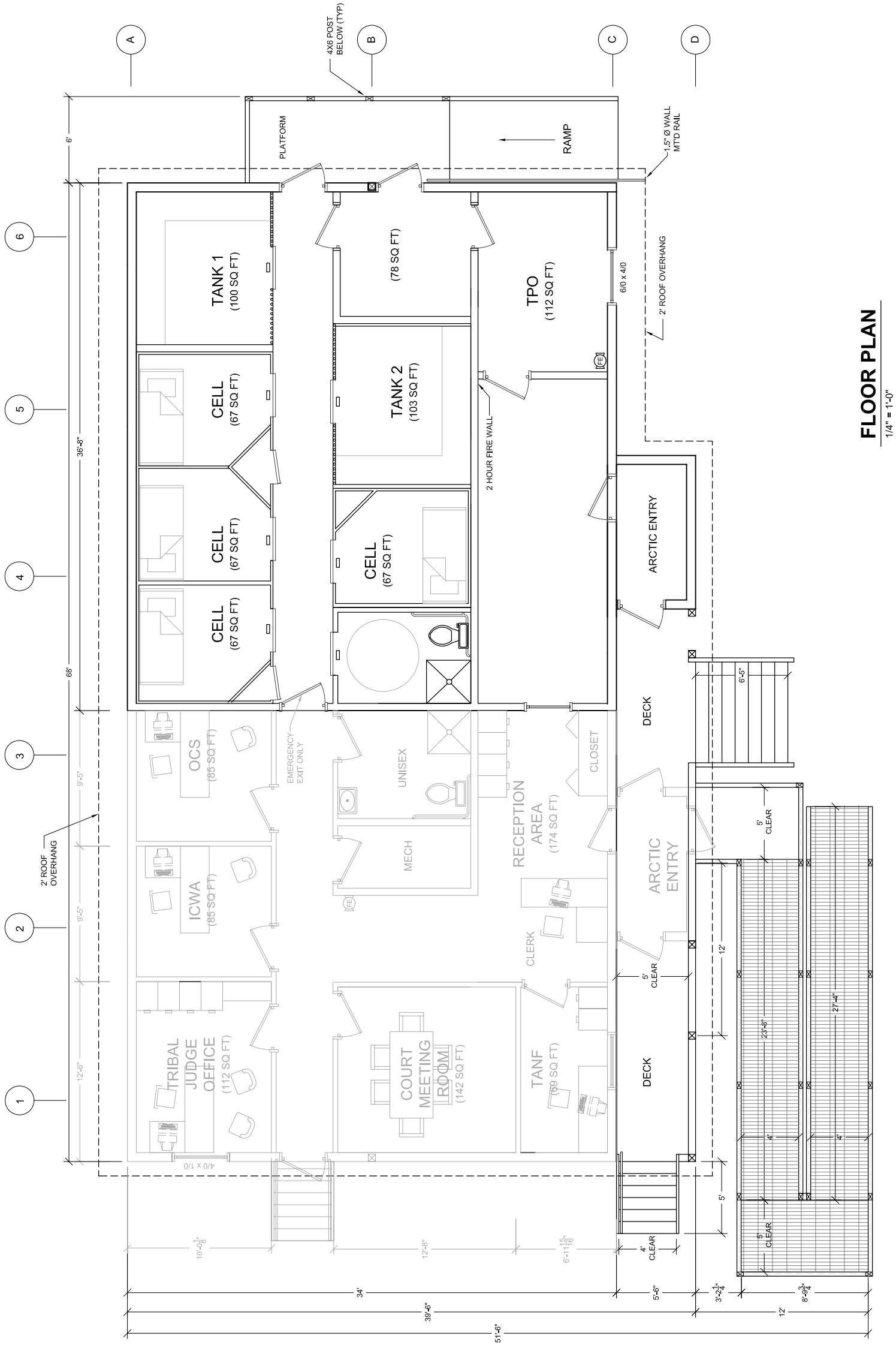
President of A.V.C.P.
Title

Dec. 10, 2007
Date

Appendix 3. Quinhagak Land Use Plan



Appendix 4. Conceptual Layout of Phase 1C



FLOOR PLAN
1/4" = 1'-0"

Appendix 5. Meeting Notes

Quinhagak Public Safety Planning Session Sign-In Sheet

- 1) Albert Friendly
- 2) Edward matic Dept of Natural Resource
- 3) Joe P. H. H.
- 4) William Church
- 5) Willie Mando
- 6) Grace L. Hill
- 7) John M. M.
- 8) Wesley Recant
- 9) Denny Jones Sr.
- 10) John White Sr.
- 11) Fannie Moore
- 12) Fannie Hernandez
- 13) Matthew Friendly
- 14) Diane Hutton
- 15) To-Mat
- 16) Frank Jx
- 17) Elizabeth pleasant
- 18) Florence Mark
- 19) John W. Fox
- 20)
- 21)

**PUBLIC SAFETY PLANNING COMMITTEE
AGENDA**

**December 19, 2007
11 am, Quinhagak Teen Center**

- 1) Update list of Planning Committee Members, contact info**
- 2) Review Program Services Plan & Program Space Plan**
- 3) Review Operating Expenses/Revenues**
- 4) Review Conceptual Layout**
- 5) Review Proposed Sites**
- 6) Next steps: Denali Commission Energy Reduction Grant**

» [Community Development](#) » [Capital Projects](#) » [Public Safety Building](#) » [Design & Engineering Documents/Conceptual Planning/Business Plan](#) » [Public Safety Facility Planning Sessions](#)



URL: <http://kbmeister.bizware.com/urls/index.php?id=3604>

Access Type: Public

Custom Access:

Users: No users added.

Categories: Community Development/Capital Projects/Public Safety Building/Design & Engineering Documents/Conceptual Planning/Business Plan

Crossref:

Attachments: [Dec 19, 2007 Committee Mtng \(NVKPublicSafetyPlanningMeetingDec192007.pdf\)](#) [33.83 kB]
[June 26, 08 Review Notes \(Highlights of Plan for Review.pdf\)](#) [48.25 kB]
[September 2007 Session \(QuinhagakPublicSafetyMtngNotes07.pdf\)](#) [40.55 kB]

[Previous](#)[Edit](#)[Delete](#)[Next](#)

Blog Content:

06/27/08 [Anthony Caole](#)

Dear Athena

cc: none

We completed yet another review session of the P/S business plan with the City of Quinhagak and NVK administration yesterday [June 26, 2008], where we reviewed the financials in detail, including both expenses, utility projections, and required revenue commitments from the City/Tribe. The following recommendations/comments were made by the City/NVK:

- * Custodial - 2 hours per day may be on the high side, but it was agreed to leave it budgeted at this to allow for any contingencies
- * Utilities 8.1.3 - add in the Phase 1 column [missing from the latest version of the business plan]; there was a lot of discussion about the impossibility of projecting where the cost of fuel will be in the coming years, and the hope that the Palin Administration will work to offset the rising prices of fuel
- * Revenues 8.2 - modify the revenue source to include both Indirect Cost Pool and/or BIA Office of Self-governance Tribal Priority Allocations
- * Sustainability 8.4 - include the option of waste heat, reference the Coastal Villages Region's Fund's "Haullywood" project, where CVRF tenders haul wood from southeast alaska to western alaska villages; there was a great deal of interest in the

A final draft of the business plan was forwarded to you last week, and per your email, you required an additional review of the business plan. Is there a time I can call you and/or meet you to discuss any further edits, revisions, or recommendations you would like to make this afternoon or this Monday?

Sincerely,

Anthony Caole
Northern Management
(907) 354-6897

Add Blog Content:

Date:

cc: [Anthony Caole](#)
[Joshua Cleveland](#)
[Brian Davis](#)
[Louie Johnson](#)
[Jane Malnoske](#)

[Add Blog Content](#)

1) How much it will cost to operate

Annual Costs to Operate:

DESCRIPTION	TOTAL	PHASE 1 ONLY
Personnel	\$10,595	\$7,874
Utilities	\$13,288	\$9,009
Materials & Equipment	\$1,800	\$1,220
Other	\$3,750	\$2,543
TOTAL O&M Expenses	\$29,433	\$20,646

Annual Personnel Expenses

DETAIL	UNIT	COST PER UNIT	UNITS PER YEAR	ANNUAL COST	PHASE 1 ONLY
Facility Manager	Hourly	\$18	52	\$936	\$936
Public Works	Hourly	\$15	52	\$780	\$780
Custodial Personnel	Hourly	\$13	520	\$6,760	\$4,583
Fringe @ 25%				\$2,119	\$1,575
			SUBTOTAL	\$10,595	\$7,874

Annual Utility Costs

EXPENSES	DETAIL	UNIT	COST PER UNIT	UNITS PER YEAR	ANNUAL COST	PHASE 1 ONLY
Utilities	Electric	Monthly	\$224	12	\$2,688	\$1,822
	Heating Fuel	Gallons	\$5	1,760	\$8,800	\$5,966
	Water/Sewer	Monthly	\$150	12	\$1,800	\$1,220
				SUBTOTAL	\$13,288	\$9,009

For purposes of the business plan, \$5/gallon has been budgeted.

Material Expenses

DETAIL	UNIT	COST PER UNIT	UNITS PER YEAR	ANNUAL COST	PHASE 1 ONLY
Maintenance & Repair Materials	Monthly	\$50	12	\$600	\$407
Custodial Supplies	Monthly	\$50	12	\$600	\$407
Office Materials and Supplies	Monthly	\$50	12	\$600	\$407
			SUBTOTAL	\$1,800	\$1,220

Insurance

DETAIL	UNIT	COST PER UNIT	UNITS PER YEAR	ANNUAL COST	PHASE 1 ONLY
Building Insurance	Annual	\$3,750	1	\$3,750	\$2,543
			SUBTOTAL	\$3,750	\$2,543

Capital Replacement Costs

DESCRIPTION	TOTAL	PHASE 1 ONLY
Facility Cost	1,220,850	\$828,000
Inflation Rate	3.54%	3.54%
Expected Life in Years	40	40
Future Value of Facility	\$4,908,951	\$3,329,329
25% Capital Replacement Amount	\$1,227,238	\$832,332
Expected Interest Rate	7.5%	7.5%
Annual Capital Replacement Expense	\$5,400	\$3,663

Repair and Replacement Costs

DETAIL	QTY	COST	USEFUL LIFE [YRS]	ANNUAL COST	PHASE 1 ONLY
Boilers & Furnaces	1	\$5,000	15	\$333	\$226
Water Heaters	1	\$2,250	10	\$225	\$153
Roofing	1	\$30,000	20	\$1,500	\$1,017
Flooring	1	\$7,500	7	\$1,071	\$726
			SUBTOTAL	\$3,130	\$2,122

2) City's financial contribution to sustain the building in terms of operating subsidies.

The primary source of revenue for maintaining and operating the facility will remain the current funding source for these costs, namely, municipal operating funds which are already appropriated on an annual basis to support the public safety facility. These funds are made available through an unconventional memorandum of agreement between the City and Tribe which consolidates the municipal and tribal administrations, reduces the City's overall administrative overhead, and frees those funds up for critical public functions such as Public Safety.

In addition, the Tribe, as a PL. 93-638 BIA [Bureau of Indian Affairs] contractor, is eligible for indirect costs and contract support costs required to administer the Tribe's federal contracts. As part of this process, the Tribe negotiates an annual so-called indirect rate, funds from which are used to pay the general administrative and facility expenses.

Fiscal Year	City Revenues & Donations to City	City Donations to Tribal Police	BIA Donations to Tribal Police	Tribal Police Revenues	Combined Tribal Police Revenues & Donations
2008	\$248,000.00	\$59111.00	\$25,000.00	\$1,500.00	\$144,721.00
2007	\$209,153.00	\$54,998.00	\$26,717.00	\$1,500.00	\$169,059
2006	\$54,715.00	\$0.00	\$75,000.00	\$10,000.00	\$154,132.00
2005	\$138,847.00	\$32,559.00	\$63,500.00	\$12,000.00	\$179,587.00

3) Confirm support for pursuing Phase 1, with the proposed location

A 2,313 SF Multi-purpose facility was recommended based on input from planning participants. Phase 1 of that consists of approximately 1,440 SF of Public Safety related space, plus 400 **additional** SF for the detached Heat Utilization Building [HUB]. The HUB will be designed to accommodate multiple buildings/facilities and provide central heating to the Public Safety building, adjacent Headstart facility, and future clinic.

The City and Tribe approved the recommended phased approach, and has prioritized completion of Phase 1 of the Public Safety facility over development of the new clinic as its number one priority. The campus site recommended by the Tribal Administrator, locating the community facility campus adjacent to and west of the existing Headstart and Health/Sanitation Building, was favored by all planning participants and approved by the City and Tribe.

The Land Use Plan was updated to allocate land to two large Community Facilities parcels which will allow for the co-location of the future clinic, Public Safety facility, Heat Utilization Building, VPSO and clinic housing. The Tribe has also updated its Long Range Transportation Plan to allow for access to the community facility campus. This will enable the use of Tribal Indian Reservation Roads funding to construct a road to the site, as well as the parking area.

At a joint council meeting of the City and Tribal Councils on February 5, 2008, the following fundamental guiding principles were adopted:

- To the extent feasible, new community buildings should be co-located at the community facilities campus which is now integrated into the community land use plan
- Any new facility design should accommodate phased expansion to reflect the increasing difficulty of securing construction funds

Appendix 6. Garn Wood Fired Boiler Economic Analysis

Wood-Fired Boiler Simple Economic Analysis

Fuel Oil Data:

Approx. Annual Fuel Cons: **38,000** gallons
Est'd Recovered Heat Avail: **0** gallons
Net Annual Fuel Consump: **38,000** gallons
Fuel Energy Content: **134,000** Btu/gallon #1
Cost of Oil: **\$2.97/gal** \$/gallon
Total Annual Cost of Heat: **\$112,860** per year
Net Annual Cost of Oil: **\$112,860** per year cost of oil used
Total Annual Energy Use: **5,092** MMBtu/year
Net Annual Oil Energy Use: **5,092** MMBtu/yr net of Recvd Ht
Oil Boiler Efficiency: **77%**
Net Annual Oil Boiler Output: **3,921** MMBtu/year

Heating Degree Days: **11327** F-Days/yr
97.5% Design Temp: **-30** F
Q peak: (NET into water) **1370** MBh
0.6 x Q peak: (into water) **822** MBh
Q from Recvd Heat: **0** MBh

Wood Boiler System: **822** MBh
Max Storage Temp: **200** F
Min Storage Temp: **150** F
Delta-T: **50** F
Storage Capacity: **6** Hrs
Qty of wood Req'd: **0.53** cords
Storage Capacity Req'd: **11829** Gals
Total Btu's Stored: **4933** MBh
Gross Btu's (into firebox): **2602** MBtu

Wood System Operation

Burn Time (hr): **2** Hr
Number of Boilers: **3** GARNs
Wood Burner Output: **976** MBh - into water
Annual Wood Energy Use: **5,228** MMBtu/year (into Burner)
Boiler energy input/stoking: **2.6** MMBtu/stoking into burner/GARN
Stokings/year: **2,009** # Stokings/year (total)
Months/year: **12** approx.
Manhours/stoking: **0.18** hrs/stoking PER GARN (not used directly)
Manhours/year: **540** (see stoking labor section below)
Cost of labor (\$/hr): **1.17** OH Rate (Not used)
Cost of labor (\$/hr): **\$35.0** (contract labor)
Cost/yr contract worker: **\$18,900**
Electric Blower Energy: **0.73** HP /GARN
Fan Runtime: **2.5** hr/stoking assume 30 minutes longer than wood takes to burn
Energy Consumption: **1.4** kWh/stoking/GARN
Cost of Electricity: **\$0.150** per kWh

Fan Energy Cost: **\$422** Total all units

Wood Sys Maintenance

Fire brick cost: **\$900**

Total O&M Cost: **\$1,322**

Wood Equipment Cost: **\$0**

Heat Load met by GARN

Oil system O&M cost /yr: **\$0**

Real Interest rate: **3.00%**

Real Fuel Oil Price Increase: **5.00%**

Real Wood Price Increase: **3.50%**

Rate of Inflation: **2.50%**

Wood Heat Data:

Average MC: **30%**

Cost of wood: **\$200/cord** \$/cord

1 cord = **100** Cubic Ft SWE

1 Cubic Ft SWE: **30.5** OD lbs

Wood Energy Content: **8660** Btu/lb (OD)

Wood used per year: **301** cords

Wood used per year: **194** (BDT)

Btu/lb wood @ MC: **5687** Btu/lb

Cost of wood: **\$60,279** \$/year

Annual Wood Energy Use: **5,228** MMBtu/year - Gross into Burner

Wood Boiler Efficiency: **75%**

Wood Energy Content: **17.35** MMBtu/cord - wet basis

Wood Weight at MC: **30.0%** 1.46 tons/green cord

Wood Weight at MC: **30.0%** 439 green tons/year

flu temp: **270** F

amb temp: **70** F

Based on HDD and Approx. Annual Fuel Consumption
Estimate 80% - 90% of Fuel Oil Saved at 60% of Peak Load
From HRU.XLS spreadsheet

Wood Boiler Peak Heat into water

Assume 200F is maximum Storage water temperature

Assume 150F is minimum useable heating temperature

Time to lower Storage Capacity (gals) by **50F**

Qty Wood to raise Storage Capacity by **50F**

At **822** MBh for **6** hrs

NOTE: About .15 cords will fit into the fire box based on

fire box volume of 38 cu. ft. and cord volume of 4' x 4' x 8'

822 output

0.15 cords/stoke

	Boiler Input	Boiler Output
Fuel Oil	\$ 22.16 \$/MMBtu	\$28.78 \$/MMBtu
Wood	\$ 11.53 \$/MMBtu	\$15.37 \$/MMBtu

	Present value of costs		
	20-year	10-year	5-year
Oil Heat	\$2,646,943	\$1,196,601	\$569,558
Wood System	\$1,814,251	\$880,043	\$433,801
Wood Costs/Oil Costs	69%	74%	76%

	Wood Heat System			Fuel Oil	Oil Heat System		Oil Heat	Wood Heat	Annual Savings using Wood Heat
	Labor Cost (\$2008)	Wood Cost (\$2008)	O & M Cost (\$2008)	Fuel Oil Cost (\$2008)	Fuel Oil Cost (\$2008)	O & M Cost (\$2008)	\$2.97/gal Cost/Yr (\$2008)	\$200/cord Cost/Yr (\$2008)	
2008	\$18,900	\$51,237	\$1,322	\$16,929	\$112,860	\$0	\$112,860	\$88,388	\$24,472
2009	\$19,373	\$53,030	\$1,355	\$17,775	\$118,503	\$0	\$118,503	\$91,533	\$26,970
2010	\$19,857	\$54,886	\$1,389	\$18,664	\$124,428	\$0	\$124,428	\$94,796	\$29,632
2011	\$20,353	\$56,807	\$1,424	\$19,597	\$130,650	\$0	\$130,650	\$98,182	\$32,468
2012	\$20,862	\$58,796	\$1,459	\$20,577	\$137,182	\$0	\$137,182	\$101,694	\$35,488
2013	\$21,384	\$60,853	\$1,496	\$21,606	\$144,041	\$0	\$144,041	\$105,339	\$38,702
2014	\$21,918	\$62,983	\$1,533	\$22,686	\$151,243	\$0	\$151,243	\$109,121	\$42,122
2015	\$22,466	\$65,188	\$1,572	\$23,821	\$158,805	\$0	\$158,805	\$113,046	\$45,759
2016	\$23,028	\$67,469	\$1,611	\$25,012	\$166,746	\$0	\$166,746	\$117,120	\$49,626
2017	\$23,604	\$69,831	\$1,651	\$26,262	\$175,083	\$0	\$175,083	\$121,348	\$53,735
2018	\$24,194	\$72,275	\$1,692	\$27,576	\$183,837	\$0	\$183,837	\$125,736	\$58,101
2019	\$24,798	\$74,804	\$1,735	\$28,954	\$193,029	\$0	\$193,029	\$130,292	\$62,737
2020	\$25,418	\$77,423	\$1,778	\$30,402	\$202,680	\$0	\$202,680	\$135,021	\$67,659
2021	\$26,054	\$80,132	\$1,823	\$31,922	\$212,814	\$0	\$212,814	\$139,931	\$72,883
2022	\$26,705	\$82,937	\$1,868	\$33,518	\$223,455	\$0	\$223,455	\$145,029	\$78,426
2023	\$27,373	\$85,840	\$1,915	\$35,194	\$234,628	\$0	\$234,628	\$150,322	\$84,306
2024	\$28,057	\$88,844	\$1,963	\$36,954	\$246,359	\$0	\$246,359	\$155,818	\$90,541
2025	\$28,759	\$91,954	\$2,012	\$38,802	\$258,677	\$0	\$258,677	\$161,526	\$97,151
2026	\$29,478	\$95,172	\$2,062	\$40,742	\$271,611	\$0	\$271,611	\$167,453	\$104,158
2027	\$30,214	\$98,503	\$2,114	\$42,779	\$285,192	\$0	\$285,192	\$173,610	\$111,582
	\$484,802	\$1,450,974	\$35,782	\$561,782	\$3,733,832		\$3,733,832	\$2,527,315	\$1,206,524

GIVEN:

Number of Boilers: **3** EA

GARN Model No.: **4400** 13,200 Gallons total boiler volume

Max Boiler Temp: **200** F

Min Boiler Temp: **150** F

Building Heat Required (MBh): **822** MBh - into water

Gross Wood Btu's/Stoking (MBtu): **7,805** MBtu - Gross wood energy

Gross Wood Btu's/hr (MBH): **3,903** MBh - Gross

Time to burn out one Stoking (Hr): **2.0** Hr - burn time check, compare to cell B33

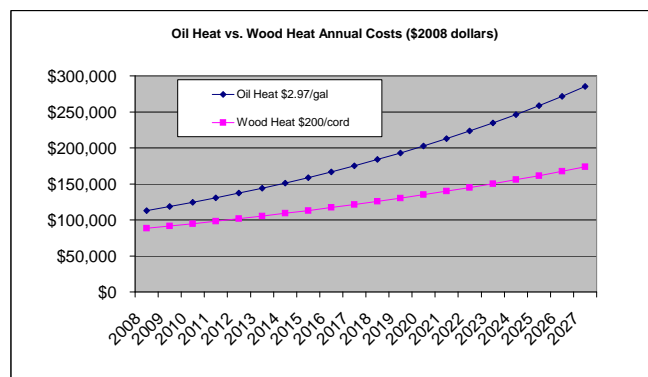
Net Wood Burner output/hr (MBH): **2,927.0** MBh - into water

ASSUMPTIONS

- Fuel oil cost is based upon February 2008 price of #1 heating oil that the Mat-Su Borough receives from Crowley at Talkeetna (\$2.97).
- Wood price estimate is from local wood contractors, based upon sustained yield harvesting of local wood resources.
- Labor rate is based upon conversation with local contractor on February 8, 2008 for \$35/hour, with 3 hr/day stoking on weekday, 2 hr/day on Saturday, and 1 hr/day on Sundays.
- Firing rates are based upon using a Gam 4400 boiler (i.e., model 3300 with extra water capacity built in).
- Firewood is assumed to be max of 2/3 birch and 1/3 spruce, dried to 30% moisture content.
- Firewood is assumed to be 100 cu ft per cord, which includes cordwood bark.
- Wood fuel cost is expected to rise at a lower rate than that of fuel oil. In this case, it has been fixed at 1% above the rate of inflation, or 3.5% per annum in this analysis.
- Wood fuel is assumed to replace 85% of the oil consumption at the facility.

NOTES

- Labor time can be significantly reduced by use of equipment to help position and load the firewood for stoking.
- There should be a year's worth of wood on hand to ensure the 30% moisture content. Having the moisture content of wood fuel up to 40% can drive the equivalent cost of wood up higher.
- Having greater heat value in the wood fuel can lead to savings in the net cost of the wood fuel. This could be achieved by a greater percentage of birch in the birch/spruce mix.



Appendix 7. FY09 Utility Cost Analysis

FY09 Utility Cost Analysis

Facility	Total Amount Electric	Aver. Monthly Electric	Total Amount Stove Oil	Aver. Monthly Stove Oil	Total Amount Fuel	Aver. Monthly Fuel	Total Amount Water/Sewer	Aver. Monthly Water/Sewer
IRA	\$ 2,382.20	\$ 216.56	\$ 5,859.69	\$ 732.46	\$ 157.20	\$ 157.20	\$ 420.00	\$ 38.18
BINGO	\$ 1,475.61	\$ 134.15	\$ 4,139.85	\$ 459.98	na	na	\$ 280.00	\$ 25.45
TPO/TC	\$ 1,019.57	\$ 92.68	\$ 2,058.94	\$ 257.36	\$ -	\$ -	\$ 10.00	\$ -
New Utility	\$ 8,443.00	\$ 703.58	\$ 25,025.00	\$ 2,085.41	\$ -	\$ -	\$ -	\$ -
Water Treat	\$ 11,330.83	\$ 1,030.07	\$ 17,580.48	\$ 1,598.22	\$ -	\$ -	\$ -	\$ -
Teen Centre	\$ 1,453.25	\$ 132.11	\$ 3,413.20	\$ 682.64	\$ -	\$ -	\$ 610.00	\$ 87.14
Fire	\$ 299.61	\$ 27.23	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Heavy Equip	\$ 2,118.39	\$ 211.83	\$ 4,138.34	\$ 591.19	\$ -	\$ -	\$ -	\$ -
Airport	\$ 1,649.60	\$ 149.96	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
City Lights	\$ 4,858.46	\$ 441.67	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Washeteria	\$ 6,092.92	\$ 553.93	\$ 48,026.86	\$ 4,802.68	\$ -	\$ -	\$ 2,625.00	\$ 238.63
Totals	\$ 41,123.44	\$ 3,693.77	\$ 110,242.36	\$ 11,209.94	\$ 157.20	\$ 157.20	\$ 3,945.00	\$ 389.40

MISC	Total Amount Phone	Aver. Monthly Phone	Total Amount Gas	Aver. Monthly Gas
All Facilities	22,553.58	2050.32		
General Fund (Water Sewer)			2885.22	288.52

From Avec Web Site - Updated information not available yet. 6.10.08				
RESIDENTIAL RATES				
VILLAGE	Cost of FUEL (A)	PCE Rate (B)	RATE PER kWh 1-500 kWh (.32+A-B)	RATE PER kWh 501-700 kWh (.32+A)
Quinhagak	0.2235	0.3364	0.2071	0.5435
SMALL COMMERCIAL RATES				
Village	Cost of Fuel (A)	Rate PER kWh 1-700 kWh (.32+A)	Rate PER kWh OVER 700 kWh (.22 + A)	
Quinhagak	0.2235	0.5435	0.4435	
Effective November 01, 2007 For October 2007 Usage for Residential and Small Commercial Revised rates are not yet available.				

Tribal Police and Tribal Court**Electric**

7/12/2007	1-6870.01	Utilities Gener	10504	P	AVEC	99.72 tpo
8/13/2007	1-6870.01	Utilities Gener	10575	P	AVEC	87.94 tpo
9/12/2007	1-6870.01	Utilities Gener	10655	P	AVEC	74.12 tpo
10/11/2007	1-6870.01	Utilities Gener	10719	P	AVEC	82.66 tpo
11/13/2007	1-6870.01	Utilities Gener	10793	P	AVEC	85.77 tpo
12/12/2007	1-6870.01	Utilities Gener	10852	P	AVEC	90.32 tpo
1/11/2008	1-6870.01	Utilities Gener	10898	P	AVEC	84.52 tpo
2/13/2008	1-6870.01	Utilities Gener	10987	P	AVEC	98.82 tpo
3/12/2008	1-6870.01	Utilities Gener	11052	P	AVEC	108.55 tpo
4/10/2008	1-6870.01	Utilities Gener	11102	P	AVEC	114.55 tpo
5/9/2008	1-6870.01	Utilities Gener	11152	P	AVEC	92.6 tpo
						1019.57 92.70 mont

Stove Oil

9/30/2007	tribal police	10 gal	10	3966	G	32.27 tpo s/o
10/31/2007	Police station	46 gallons	46	4017	G	148.43 tpo s/o
11/30/2007	police	53 gal	53	4027	G	171.02 tpo s/o
12/31/2007	tribal police	61.6	62	4066	G	198.76 tpo s/o
1/31/2008	tribal police	79.8 gal	80	4087	G	257.49 tpo s/o
2/29/2008	66.1 gal	police	66	4121	G	213.28 tpo s/o
3/31/2008	police	59.7 gal	60	4133	G	192.63 tpo s/o
4/30/2008	police	45 gal s/o	45	4168	G	145.2 tpo s/o
						1359.08
12/31/2007	tribal court	65.5	66	4066	G	211.35 tc s/o
1/31/2008	tribal court	51.4 gal	51	4087	G	165.85 tc s/o
2/29/2008	45 gal	tribal court	45	4121	G	145.2 tc s/o
3/31/2008	tribal court		44	4133	G	141.97 tc s/o
4/30/2008	tribal court	11 gal	11	4168	G	35.49 tc s/o
						699.86
						2058.94 257.36 mor

Appendix 8. Public Safety Facility Inventory Form

Building Worksheet

1. Name of Building: Public Safety Building

2. Owner of the Building or Structure: City of Quinhagak

3. Owner of the land under the building: City of Quinhagak
Is this land leased OR owned fee simple title X OR unable to determine

4. Year constructed and renovated General Condition of Building

Unsanitary; No flushable Commode or water [honey bucket] all water haled in. Floor needs renovated; stairways unsafe; no handicap; no exit from building [safety hazard]

5. Total Dimensions of Building: Length: 46 (ft.) Width : 24 (ft.)
AND OR Total Building Square Footage: sq. ft.

6. Functional Spaces [office spaces, conference rooms, and other useful spaces, excluding common areas such as bathrooms, mechanical, hallways, etc.]

Functional Space 1: Name of Space: Tribal Court
Length: 15.3 (ft.) X Width : 13.4 (ft.) = Total Sq. Ft. 205.02

What program or service is operated in this space? Name it and describe it:

Trial Court and Judge

What entity provides this program or service? City of Quinhagak

Functional Space 2: Name of Space Evidence Room
Length: 4 (ft.) X Width : 5 (ft.) = Total Sq. Ft. 20

What program or service is operated in this space? Name it and Describe it:
Confidential Court Documents stored

What entity provides this program or service? City of Quinhagak

Functional Space 3: Name of Space Storage/ Filing Room
Length: 7.4 (ft.) X Width : 9.5 (ft.) = Total Sq. Ft. 70.3
What program or service is operated in this space? Name it and Describe it.
Storage of Tribal Court documents and property

What entity provides this program or service? City of Quinhagak

Northern Management Building Inventory

**Quinhagak, Alaska
December 2006**

Functional Space 4: Name of Space (3) Holding Cells

Length: 7 (ft.) X Width : 7 (ft.) = Total Sq. Ft. 49

What program or service is operated in this space? Name it and describe it:

Holds Prisoner

What entity provides this program or service?

City of Quinhagak

Functional Space 5: Name of Space Bathroom

Length: 2 (ft.) X Width : 4 (ft.) = Total Sq. Ft. 8

What program or service is operated in this space? Name it and describe it:

What entity provides this program or service?

Functional Space 6: Name of Space

Length: (ft.) X Width : (ft.) = Total Sq. Ft.

What program or service is operated in this space? Name it and Describe it:

What entity provides this program or service?

Functional Space 7: Name of Space

Length: (ft.) X Width : (ft.) = Total Sq. Ft.

What program or service is operated in this space? Name it and Describe it:

What entity provides this program or service?

Functional Space 8: Name of Space

Length: (ft.) X Width : (ft.) = Total Sq. Ft.

What program or service is operated in this space? Name it and Describe it:

What entity provides this program or service?

Functional Space 9: Name of Space

Length: (ft.) X Width : (ft.) = Total Sq. Ft.

What program or service is operated in this space? Name it and Describe it:

What entity provides this program or service?

Functional Space 10: Name of Space _____

Length: _____(ft.) X Width : _____(ft.) = Total Sq. Ft. _____

What program or service is operated in this space? Name it and Describe it:

What entity provides this program or service?

Total Functional Space Square Footage: _____

7. Common Space [mechanical, hallways, entryways, storage, etc.]:

Total Building Sq. Footage (from #5) _____

Minus (-) Total Functional Space Square Footage (from #7) _____

Total Common Space Square Footage _____

8. COMMUNITY INPUT ON CURRENT FACILITY AND NEEDS

Does this facility meet the current needs of services and community? _____

If NO, what additional space is needed? _____

How will this improve service? _____

ADD DIGITAL PHOTOS OF EXTERIOR AND EACH FUNCTIONAL SPACE BELOW
LABEL EACH

